CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, January 23, 1908.

CONTENTS.

CONSTRUCTION NEWS:
List of Contracts Pending..... 23
Railways 23
Electric Railways 24
Light and Power Plants..... 24
Bridges 25
Buildings 25
Water Supply and Irrigation..... 26
Sewerage 26
Garbage Disposal 26
Streets and Roads..... 26
Manufacturing Plants 27
Miscellaneous Contracts 27
U. S. Possessions and Cuba..... 27
Contract Prices 27
TRADE PUBLICATIONS 28
PROPOSALS 28

CONSTRUCTION NEWS.

PLANS AND SPECIFICATIONS ON FILE.

(denotes that this work is advertised in Engineering News.)*

The following Plans (P.) and Specifications (S.) are on file and may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York.

1-24 Concrete reservoir, Ft. Barrancas, Fla. .....(S.) 1- 9
2- 1 Bridge, Old Monroe, Mo.....(S.) 1- 2
2- 1 Chimney, Portsmouth, Va...(S.) 1-16
2- 1 Highway, Attleboro, Mass. .....(P. & S.) 1-16
3- 1 Water-works supplies, Vancouver, B. C.....(S.) 1-16

LIST OF CONTRACTS PENDING.

LIGHT, HEAT AND POWER PLANTS.

1-24 Lighting plant, Morehead, Ky.... 1-23
1-30 Lights, etc., Buffalo, N. Y..... 1-23
2- 1 Chimney, Portsmouth, Va..... 1-16
2- 4 Light system, Indianapolis, Ind.. 1- 9
2-13 Gas producer, Milwaukee, Wis... 1- 9

BRIDGES.

1-25 Iron bridge, Bethlehem, Pa..... 1-16
1-27 Pile bridge, Julesburg, Colo..... 1-23
1-28 Pile bridge, Omaha, Neb..... 1-23
1-29 Bridge alterations, Kittanning, Pa. 1-23
1-29*Lift bridge, Elizabeth, N. J.... 1- 9
1-30 Bridges, Great Falls, Mont..... 1-16
1-30 Foot-bridge, Buffalo, N. Y..... 1-23
1-30 Superstructure, Napoleon, Ohio.. 1-23
1-31 Bridge, Cincinnati, O 1-16
1-31 Bridge, Victoria, B. C..... 1- 2
2- 1 Bridge, Old Monroe, Mo.....12-12
2- 3*Steel bridge, Washington, La..... 1-16
2- 3 Steel bridge, Silt, Colo..... 1-23
2- 3 Steel drawbridge, Savannah, Ga... 1-23
2- 3 Pile bridge, Greenville, Miss.... 1-23
2- 5 Bridges, Colfax, Wash..... 1-23
2- 5 Steel bridge, Grants Pass, Ore.. 1-16
2- 6 Girder supports, New York..... 1-23
2- 8 Iron bridge, Carterton, Va..... 1-23
2-11 Steel bridges, Grand Forks, N. Dak. 1-23
2-12 Bridges, Cleveland, Ohio.....
2-14 Bridge, Huntsville, Mo. 1-23

BUILDINGS.

1-25*Foundation, Wilmington, Del.... 1- 9
1-25*Market, Washington, D. C..... 1-16
1-27 City Hall, San Jose, Cal..... 1- 9
1-29 Building materials, New York.. 1-16
2- 1 School, Anderson, Ind..... 1- 9
2- 4 Lodging house, New York..... 1-23
2- 6 Buildings, Ft. Riley, Kan..... 1-16
2- 7 Officers' quarters, Ft. Monroe, Va. 1- 9
2- 7 Home, Elkins, W. Va..... 1-23
2-10 Repairs, Norwalk, O..... 1-16
2-11*Post-office, etc., Chattanooga, Tenn..... 1- 2
2-12 Building, Chattanooga, Tenn..... 1-16
2-12*Boat-house, Delaware City, Del.. 1-16
2-14 Post-office, Bluefield, W. Va..... 1- 9
2-17*Post-office, Ogden, Utah..... 1- 2
2-17 School, Cincinnati, Ohio..... 1-23
2-18 Post-office, Columbus, Ohio..... 1- 9
2-18 School, La Crosse, Wis..... 1- 9
2-21 Post-office, Pine Bluff, Ark..... 1-16
2-25*Post-office, Marinette, Wis..... 1-16
3- 2 Gymnasium, Madison, Wis..... 1-23
3- 2 Post-office, Colorado Springs, Colo. 1-23

WATER-WORKS.

1-21 Pipe specials, etc., Hamilton, Ont. 1-16
1-24 Reservoir, Ft. Barrancas, Fla... 1- 9
1-24*Conduits, etc., Monterey, N. L., Mex. 1-16
1-27 Distribution system, North Yakima, Wash. 1-16
1-28 Engines, Toronto, Ont.....12-26
1-30*Shelter houses, Philadelphia, Pa. 1-16
1-31 Water pipe, Minneapolis, Minn.. 1-16
2- 3*Pipes and castings, Yonkers, N. Y. 1-16
2- 3*Stand-pipe, Marion, Mass..... 1-23
2- 3 Water-meters, Yonkers, N. Y.... 1-23
2-12 Water-pipe, South Bend, Ind..... 1-23
2-15*Steel tank, Madison Barracks, N. Y. 1-16

SEWERS.

1-24 Sewer system, etc., Richmond, Ind. 1-16
1-24*Outfall sewer, Monterey, N. L., Mex. 1-16
1-24*Sewer, Springfield, Ohio..... 1- 9
1-24*Relief sewer, Wilmette, Ill..... 1- 9
1-24 Sewerage system, Woodstock, Ill. 1-23
1-24 Storm drains, etc., Downers Grove, Ill. 1-23
1-27 Pipe, etc., St. Paul, Minn. 1-23
1-27 Storm sewer, Berea, Ohio..... 1- 9
1-27*Tile sewers, Bartlesville, Okla... 1-16
1-28 Sewer, Des Moines, Iowa..... 1-16
1-29 Sewer reconstruction, etc., New York, N. Y. 1-23
1-29 Sewers, Brooklyn, N. Y..... 1-23
1-30 Sewers, New York, N. Y..... 1-23
1-31 Sewer pipe, Jackson, Mich..... 1-23
1-31 Sewers, Canton, Ohio 1-23
1-31 Sewers, Buffalo, N. Y..... 1-23
2- 4*Pipe sewers, Tecumseh, Mich..... 1-16
2- 8 Trunk sewer, Seattle, Wash..... 1-16
2-10*Sewer, Hattiesburg, Miss. 1-23
2-18 Sewer, Hamilton, Ohio 1-23

STREETS AND ROADS.

1-23 Grading, etc., Grand Rapids, Mich. 1-23
1-24*Cement walks, etc., Richmond, Ind..... 1- 9
1-24 Grading, etc., Downers Grove, Ill. 1-23
1-27 Macadam, Sacramento, Cal..... 1-23
1-27 Grading, etc., Youngstown, Ohio. 1-23
1-27*Paving, etc., Atlantic City, N. J.. 1-16
1-28 Brick paving, etc., Lebanon, Ill.. 1-23
1-29 Paving, etc., Baltimore, Md..... 1-23
1-29 Asphalt, Louisville, Ky. 1-23
1-30 Regulating, grading, etc., New York, N. Y. 1-23
2- 1 Stone street work, Kennett Square, Pa. 1-23
2- 1 Brick pavement, Newark, Ohio... 1-23
2- 1 Gravel roads, Pontiac, Mich..... 1- 9
2- 1 Brick paving, Newark, Ohio.... 1- 9
2- 1 Road, Attleboro, Mass..... 1- 2
2- 3 Gravel road, Vernon, Ind..... 1-16
2- 3 Gravel road, Crawfordsville, Ind.. 1-16
2- 3 Gravel roads, Lebanon, Pa..... 1-16
2- 3 Road, Greensburg, Pa..... 1-16
2- 3 Road, Hempfield, Pa. 1-23
2- 3 Macadam road, Salem, Ind..... 1-23
2- 3 Grading, Youngstown, Ohio..... 1-23
2- 3 Road construction, Harrisburg, Pa. 1-23
2- 4 Gravel roads, Washington, Ind... 1-23
2- 4*Paving and macadamizing, Billings, Mont. 11-21
2- 6 Paving, etc., Manistee, Mich..... 1-23
2- 6 Gravel road, New Albany, Ind... 1-23
2- 6 Gravel roads, Rockville, Ind..... 1-23
2- 6 Stone roads, Brazil, Ind..... 1-23
2- 6 Road repair, etc., Washington, Pa. 1-23
2- 7 Macadam roads, Fort Washington, Md. 1-16
2-10 Screenings, etc., Pittsburg, Pa.... 1-23
2-10 Macadamized roads, Bedford, Ind. 1-23
2-11 Street improvements, St. Louis, Mo. 1-23
2-13*Brick paving, North Olean, N. Y. 1-23
2-15*Concrete sidewalk, Madison Barracks, N. Y 1-16
2-15 Limestone, etc., Muskegon, Mich. 1- 9
2-19 Dyking, etc., Aberdeen, Wash.. 1- 9
2-21*Street improvement, Salt Lake City, Utah 1-16
2-22 Gravel road, Terre Haute, Ind.. 1-23
3- 2 Sidewalks, Fayetteville, Tenn..... 1-16

MISCELLANEOUS.

1-24 Fire hose, apparatus, New York.. 1-16
1-24 Ditch, Breckenridge, Minn..... 1-23
1-25*Guide walls, paving, etc., Wheeling, W. Va.....12-26
1-27 Bulkhead, Ft. Terry, N. Y..... 1- 9
1-27 Revetment, Nat. Soldiers Home, Va..... 1- 9
1-27 Power launches, New York..... 1-16
1-27 Gasoline automobile, New York.. 1-16
1-27 Tile drains, Mason City, Iowa... 1-23
1-28 Sprinkling truck repairs (Garbage), New York, N. Y..... 1-16
1-28 Cement, lumber, sand, etc., New York, N. Y..... 1-16
1-28 Corral fence, Ft. Riley, Kan.... 1-23
1-28 Garbage removal, etc. (Garbage), Reading, Pa. 1-23
1-29 Dredging, Brooklyn, N. Y..... 1-23
1-29*Dredging, Norfolk, Va..... 1- 9
1-30 Concrete dam, Los Angeles, Cal.. 1-16
1-31*Canal, Albany, N. Y..... 1- 9
1-31 Ditch, Genesco, Ill..... 1-23
1-31 Motor truck, New York..... 1-23
2- 1*Dredging, New York, N. Y..... 1- 2
2- 1*Wooden hull, Montgomery, Ala.. 1- 9
2- 1 Tunnel, Buena Vista, Colo..... 1-23
2- 3*Cable railways, Panama..... 1-23
2- 4*Steamboat landing, Erie, Pa.....12-19
2- 5*Revetment, Grand Rapids, Mich. 1- 9
2- 5 Deepening creek, Prophetstown, Ill..... 1- 9
2- 5 Ry. material, Ft. Leavenworth, Kan. 1-23
2- 6*Dredging, Wilmington, Del..... 1- 9
2- 7 Ditches, Elbow Lake, Minn..... 1-16
2-10*Repairing wharf, Boston, Mass... 1-16
2-10*Snagboats, Mobile, Ala..... 1-16
2-10*Excavation, etc., Nashville, Tenn. 1- 9
2-10 Wharf repairs, Boston, Mass.... 1-23
2-11 Garbage reduction, St. Louis, Mo.12-12
2-14*Dredge, Galveston, Tex..... 1-16
2-15 Boat-house, etc., Biloxi, Miss.. 1-23
2-17*Dams, etc., Rock Island, Ill.... 1-23
2-19*Filling, Aberdeen, Wash..... 1- 9
3-12 Canal, Ottawa, Ont..... 1-23
3-14*Walls, Buffalo, N. Y..... 1-16
No date. Creosote, Victoria, B. C..... 1-23

FOREIGN.

2- 4 Mining concession, Turkey 1- 2
2-15 Designs, Municipal Bldgs., China. 1- 2
3-11 'Phone material, Australia.....11-28
3-31 Railway, hotel, Cape Colony..... 1-16
5- 1 Elec. railways, Argentina.....11-21

CIVIL SERVICE.

2- 1 Nurseries inspector, Albany, N.Y. 1- 9
2- 1 Leveler, Albany, N. Y..... 1- 9
2- 1 Steam Engr, Albany, N. Y..... 1- 9
2- 1 Bridge Designer, Albany, N. Y.. 1- 9
2- 1 C. E. Draftsman, Albany, N. Y.. 1- 9
2- 1 Foreman orchards, Albany, N. Y. 1- 9

RAILWAYS.

(denotes that this work is advertised in Engineering News.)*

ALBERTA & NORTHWESTERN.—McGiverin, Haydon & Greig, attorneys, 19 Elgin St., Ottawa, advise us that no further steps have been taken than to apply for a charter for this railway. Noted on Dec. 5.

BOCA & LOYALTON.—Surveys are stated to have been completed and estimates of cost made for the extension of this road from a point near Beckwith to the timber lands of the Marsh Lumber Co., in the Clover Valley country. The cost of the extension is estimated at $20,000 per mile. This railroad now runs from Boca to Loyalton and Beckwith, Cal., 40 miles. W. S. Lewis is Gen. Mgr.

CANADIAN PACIFIC.—A contract for the construction of a portion of the Sumas-Seattle, Wash., extension of the Canadian Pacific Ry. has been secured by the PUGET SOUND BRIDGE & DREDGING CO., 95 Yesler Way, Seattle, and work on it probably will be started by March 1.

CHICAGO, MILWAUKEE & ST. PAUL.—Construction work will be completed, it is stated, on the Pacific extension between St. Paul, Minn., and Butte, Mont., by March 1. It is planned to establish train service this summer between those points.

COLORADO & NORTHERN.—Surveys have been made, it is stated, from Hayden, for about 35 miles toward Hahn's Peak, Routt County, Colo. The distance between Hayden and Hahn's Peak is 60 miles. Grading probably will commence as soon as the Denver, Northwestern & Pacific Ry. reaches Hayden to bring supplies. It is expected to let contracts next spring for building the line. It will reach the anthracite coal fields of Routt County, Colo. B. L. Dorsey is Pres., 1016 Missouri Trust Bldg., St. Louis, Mo.; Paul Blont, Ch. Engr.; A. A. Johnson, Vice-Pres.; E. M. Johnson, Secy. and Treas.; Halstead L. Ritter, Solicitor, all of Denver, Colo. (See under Denver, Northwestern & Pacific.)

DENVER, NORTHWESTERN & PACIFIC.—A report from Denver to the New York "Sun" states that a contract has been signed by which 2,000 men will be put to work to complete the Moffat road (the D. N. W. & P.) to Salt Lake City, as rapidly as possible. A company which has at its head D. C. Dodge, of Denver, builder of the Rio Grande & Rio Grande Western; Charles Boettcher, head of the Great Western Sugar Co., Sugar Bldg., Denver; Thomas F. Walsh, of Washington; Laurence C. Phipps, of Pittsburg, and H. M. Porter, of Denver, has been formed to push the road and relieve Mr. Moffat of the sole responsibility. This road is the short cut to the Pacific Coast and will reduce by eight hours the time from Denver to the Coast. It is to be built immediately to the Routt County coal fields, and the promoters expect to reach that point before the Union Pacific gets in from the north. Within 24 months the road will reach Salt Lake City, Utah. (See also Colorado & Northern.) Noted on Oct. 24 and Jan. 2.

DENVER & TRANSCONTINENTAL.—Surveys are completed for the first division of this railroad from Denver to the Pacific coast. The company was incorporated in 1906. W. W. Borst is Secy., Empire Bldg., Denver, Colo. Others interested in the project are D. C. Hayt, W. A. L. Cooper, L. F. Kimball, R. C. Vidler, L. W. Vidler and Fred. R. Wright, of Denver; and Charles A. Baldwin, of Colorado Springs, Colo.

FLORIDA CENTRAL.—Service has been established for distance of 27 miles, between Vereen and Mayo, Fla. The officials of the road are as follows: J. I. Phillips, Pres.; J. S. Gordon, Vice-Pres.; Z. Middlebrook, Gen. Mgr.; Charles Phillips, Jr., Treas.; C. J. Acosta, Gen. Freight and Passenger Agent, and C. F. Fincher, Auditor. An extension to Thomasville, Ga., is being constructed. Noted on Nov. 28.

GEORGIA.—C. T. Walker, 319 Kiser Bldg., Atlanta, Ga., is reported to contemplate building a railroad 160 miles long to cost about $6,000,000.

GRAND TRUNK PACIFIC.—Frank Morse, Gen. Mgr. and Vice-Pres. of the Grand Trunk Pacific, has made the official announcement that a branch line of the Grand Trunk Pacific to Montreal, Que., will be constructed. Mr. Morse stated that while the point of departure from the main line had not been settled a branch line would be completed into Montreal by the time the main line was an accomplished fact. No change is to be made in the route to be followed through the coast range and the line east of Prince Rupert, bids for the construction of which will be called for at once, will be constructed via Hazelton. Noted on Dec. 12.

INTERCOLONIAL.—The commissioners appointed to examine and report on the conditions of the branch lines of railway in New Brunswick, and also to obtain options on the same, have presented their report to the Government. There are nine branch lines of railway in New Brunswick which tap the I.C.R., as follows: The Caraquet Ry., the Kent Northern Ry., the Beersville Coal & Ry. Co. line, the Buctouche & Moncton Ry., the New Brunswick & Prince Edward Island Ry., the Salisbury & Harvey Ry., the Elgin & Havelock Ry., the St. Martin's Ry., and the York & Carleton Ry. These lines were thoroughly inspected and the commissioners report that as branches they are of importance and benefit to the I.C.R.

KANSAS.—Bids are asked until Feb. 5 for supplying railway material at Fort Leavenworth, Kan. See under Miscellaneous Contracts—"Railway material."

MOUNT McKAY & KAKABEKA FALLS.—This company will apply to the Legislative Assembly of Ontario for power to build on either the north or south side of the Kaministiquia River. They will also apply for an act extending the time for the completion of the railway until April 30, 1912. Blake, Lash & Cassells, Bank of Commerce Bldg., Toronto, Ont., are the company's solicitors.

NEW ORLEANS, FORT JACKSON & GRAND ISLE.—Contract has been awarded to ELMER T. HAINES, of New Orleans, it is announced, for the construction of a branch from a point on the main line to Barataria Bay, about 20 miles. The preliminary surveys are completed and the purchase of right-of-way is now being made. The work of construction will begin soon. Frank T. Howard is Pres., 555 Carondelet St., New Orleans, La. Noted last week.

PENNSYLVANIA R. R.—We are officially advised that all the surveys and plans have been prepared for two additional tracks in the vicinity of Greensburg, Pa. This particular piece of track involves no change of line, but is very heavy work and will cost approximately $600,000 for the one mile where there are only two tracks at the present time. The work, however, has not been authorized and is not likely to be considered for some time to come on account of present conditions. Neither have the necessary ordinances been secured for changes in the various streets.

PITTSBURG, BINGHAMTON & EASTERN.—H. A. Schwanecke, Ch. Engr., Canton, Pa., advises us that grading has been completed from Cedar Ledge to Powell, Pa., 21 miles; 4½ miles of track are laid on this section. The HOLBROOK, CABOT & ROLLINS CORPORATION, 6 Beacon St., Boston, is the contractor. The P., B. & E. R. R. will be built from Binghamton, N. Y., to Clearfield, Pa., 232½ miles. Surveys are made and right-of-way is partly secured. L. Hooper, Boston, is Pres. Construction will be heavy. Extensions are proposed.

SOUTHERN LOUISIANA & NEW ORLEANS.—This railroad will run from Oakdale, La., a terminus of the Santa Fe, via Ville Platte to Opelousas, La., 40 miles. Engineers are now making surveys. It is also projected to run from Opelousas to New Orleans, via Whitecastle, Napoleonville and Hahnville, La. The officers are Yves Andrepont, Pres.; Geo. A. Clark, Vice-Pres.; J. G. Lawler, Secy., and D. L. Guilbeau, Treas., all of Opelousas, La.

STATESVILLE AIR LINE.—Survey has been completed by L. W. Greenlee, Ch. Engr., Statesville, N. C., for this line from Statesville to Mount Airy, 60 miles. Estimates, maps, etc., have been prepared and submitted to the Board of Directors. Noted on Oct. 17.

WYOMING.—The Chamber of Commerce of Sheridan, Wyo., is raising funds to build a railroad from Sheridan down the Tongue River to Miles City, Mont., 142 miles, through an agricultural and coal-fields section.

ELECTRIC RAILWAYS.

WATERBURY, CONN.—The State Board of Railroad Commissioners has granted the petition of the New York, New Haven & Hartford Railroad Co. for power to take, under condemnation proceedings, land needed for the right-of-way for an electric road in the town of Middlebury. The property is desired in connection with a trolley line that the company will build from Waterbury to Middlebury and thence to Woodbury. J. K. Punderford, Gen. Mgr., New Haven.

ROCHESTER, N. Y.—Preliminary survey has been made for the proposed Rochester, Scottsville & Caledonia Elec. Ry. It will run to Scottsville, Caledonia, Le Roy, Pavilion, Perry, Castile and Portage; with branches from Pavilion to Warsaw, twelve miles, and from Le Roy to Batavia, ten miles.

JOHNSTOWN, PA.—The Johnstown Passenger Ry. Co. plans improvements for the coming year to cost $100,000, which was voted at a recent meeting of the directors of this company. Of this amount about $62,000 will be expended on the new system in the Morrellville district, for which a franchise was recently granted by the City Councils. The main line of the system between the Eighth Ward transfer station and the Moxham bridge will also be rebuilt. No action was taken on the proposed extension of the line from Walnut Grove to Geistown, as the company will not build the line unless the right-of-way is secured without cost to the corporation. S. E. Young is Secy. and Mgr.; G. Nelson Smith is Ch. Engr., Johnstown, Pa.

BRUNSWICK, GA.—The City & Suburban Railway Co. will soon begin active work on its electric car line under the franchise granted F. D. M. Strachan and his associates several months ago. The work of making the necessary surveys of the line has been completed and the city engineer has been furnished with a copy of the proposed route of the line. Under the terms of the franchise granted by council, the company has until Jan. 1, 1909, in which to complete the line, or in which to have at least four miles in active operation. As noted on Aug. 29, 1907, this "company was organized to construct an electric line four miles long. The incorporators are F. D. M. Strachan, Frank D. Aiken, E. F. Coney, C. Downing and A. Fendig of this city; and George P. Walker, George F. Armstrong and Harry D. Strachan of Savannah, and Ernest L. Simpson, 59 West 88th St., and Lewis H. Spence, 320 West 75th St., New York."

LOUISVILLE, KY.—Plans are being considered by the Indianapolis & Louisville Traction Co. for the construction of an east

and west line, one of which is proposed from Scottsburg to Madison, Ind., and on to Cincinnati, Ohio. The Louisville & Northern Railway & Lighting Co. also is said to be considering the construction of an extension from Charleston to Madison, which will connect with the Indianapolis & Louisville line at the last named point. A. A. Anderson, Seymour, Ind., is Gen. Mgr.

ELYRIA, OHIO.—The Elyria, Southern Railway Co. probably will begin construction soon on its proposed line which will connect Elyria, La Grange, Spencer, West Salem, Ashland, Mansfield and Columbus. It is the intention of the company to install the overhead trolley system. Current will be generated at a station which is to be built at Elyria. The repair shops will be located in the same city. The temporary authorized capital stock is $100,000. The officers of the company are as follows: Sumner B. Day, Lorain County Bank, Elyria, Pres.; Frank H. Foster, Elyria, Vice-Pres., and W. E. Elliott, Elyria, Vice-Pres. and Gen. Mgr.; W. E. Moser, Elyria, Secy.; J. M. Starr, La Grange, Treas. G. A. Lagron, Elyria, is Engr. A stockholders' meeting will be held on Feb. 8, when permanent arrangement for the construction of this line will be made. Noted on Aug. 1, 1907.

RAVENNA, OHIO.—The Cleveland, Alliance & Mahoning Valley Ry. Co. expects to begin construction work in March or April on its line between Ravenna and Warren, Ohio. In addition to electrifying the line from Ravenna to Newton Falls, which was purchased from the Baltimore & Ohio R. R. Co., nine miles of grading and tracklaying must be done. It is stated that this railway will be in operation by Sept. 1, 1908. When completed it will form a connecting link between the Northern Ohio Traction & Light Co. line at Akron, Ohio, and the Mahoning & Shenango Railway & Light Co. at New Castle, Pa. J. W. Holcomb, Cleveland, Ohio, is the promoter.

VALPARAISO, IND.—The Winona Interurban Ry. Co. has completed surveys for the line between Valparaiso and Fort Wayne, Ind. S. C. Dickey is Gen. Mgr., Warsaw, Ind.

CALUMET, MICH.—The Calumet & Lac La Belle Traction Co. will begin construction soon on its proposed electric railway between Calumet and Mohawk. S. M. Weil is interested.

KALAMAZOO, MICH.—An extension will be built between Kalamazoo and Niles, Mich., it is reported, by the Southern Michigan Ry. Co. This company now operates the line connecting South Bend, Ind., and St. Joseph, Mo. J. McM. Smith is Gen. Mgr., South Bend, Ind.

MISSOULA, MONT.—The Missoula & Bitter Root Traction Co. has completed survey for its proposed route between Missoula, Stevensville, Corvallis and Hamilton, a distance of about 42 miles. Over 28 miles of right-of-way has already been donated. The total capital stock is $55,000, of which $40,000 is authorized and $15,000 issued. F. O. Lewis, of Stevensville, Mont., is Secy. and Treas.

LITTLE ROCK, ARK.—The Little Rock & Pine Bluff Traction Co. has awarded the contract for the electrical supplies for building this interurban line between Little Rock and Pine Bluff to the WESTINGHOUSE ELECTRIC CO. for $115,000. The ARKANSAS CORRUGATED METAL CULVERT CO., Little Rock, Ark., has secured the contract for all culverts and conduits. Grading is under way. An extension to Stuttgart, Ark., may be built by the company.

GROESBECK, TEX.—W. H. Wilson has had a preliminary survey made and estimate of cost prepared for a street railway connecting that city with the park.

PUEBLO, COLO.—N. C. Van Natta, Ch. Engr. of the Pueblo & Arkansas Valley Elec. Ry. Co., Pueblo, states that this railway will extend from Pueblo to Fowler, Colo., and that surveys have been completed for the entire distance, 36 miles. Contracts will be let as soon as estimates have been prepared and additional right-of-way secured. The road will be built for high-speed freight and passenger service. Noted on Jan. 9.

PORTLAND, ORE.—Surveys have been completed by the Portland, Gray & Lewiston Elec. Ry. Co. for its line between Portland and Lewiston. Plans for the permanent location of the route are now being made with a view to starting work early in the spring, it is reported. John A. Jones, Lewiston, Me., is Ch. Engr.

LOS ANGELES, CAL.—The Ventura Terminal Ry. Co., it is reported, proposes to build an electric railway to the cement rock quarry at tidewater, where a cement factory will be built, a distance of 25 miles, and a 5-mile branch to Nordhoff and the Ojai valley. Preliminary surveys have been made and most of the right-of-way secured. Part of the capital has been obtained. Contracts are to be let as soon as financial conditions improve. These enterprises will be owned and financed by the Ventura Industrial & Securities Co., which will sell the bonds. William A. Ramsey is Ch. Engr., I. W. Hellman Bldg., Los Angeles, Cal.

CALGARY, ALTA.—Alexander & Budd, promoters, representing J. Balfour, an English railway capitalist, have applied for a 15-year franchise to build an electric street railway here.

*PANAMA.—For cable railways and duplex cableways see under U. S. Possessions and Cuba.

LIGHT AND POWER PLANTS.

MONSON, ME.—ERNEST D. BLAISDELL, of Dexter, Me., has secured contract for installing an electric light plant for the Monson Light & Power Co.

CHICOPEE, MASS.—The J. Stevens Arms & Tool Co. is making arrangements to install a 50-HP. direct connected generating unit to furnish electricity for lighting its plant, it is stated. The contract for the electrical machinery has been let to the WESTINGHOUSE ELECTRIC & MFG. CO., Westinghouse Bldg., Pittsburg, Pa.

BUFFALO, N. Y.—Bids are asked by F. G. Ward, Comr. of Public Utilities, until Jan. 30, for installation of the necessary lights and lighting on the bascule bridges over the Buffalo River on Michigan, Ohio and South Michigan Sts., including roadway signals and channel signals, in accordance with the U. S. Light-house regulations.

BALTIMORE, MD.—The Board of Awards awarded contract on Jan. 15, to the CONSOLIDATED GAS CO., Lexington and Liberty Sts. The company agrees to supply gas at the rate of $7.25 a lamp a year and at the rate of 85 cts. per 1,000 cu. ft. for lighting public buildings. It is estimated that each lamp will consume 10,000 cu. ft. a year. If it is found that more than this is consumed the city is to pay the company at the rate of 72½ cts. per 1,000 cu. ft. Douglas Burnett is Mgr.

WASHINGTON, D. C.—Bids were received by the Superintendent of the U. S. Capitol Buildings and Grounds, Washington, Jan. 15, for the installation of (A) two boiler feed pumps; (B) four barometric condensing equipments; (C) four induction motors and four single-phase transformers; (D) one electric crane; (E) four chimneys in the new central power house. Bids were received on the whole or any part of the work as follows: National Electrical Supply Co., 1330 New York Ave., Washington, $118,966; (A) $3,520; (B) $20,811; (C) $11,880; (D) $25,725; (E) $57,030. D'Olier Engineering Co., 121 South Eleventh St., Philadelphia, $118,000; (B) $28,858; (C) $11,836; (E) $78,000; (B), (C), and (D), $40,000. M. W. Kellogg Co., 115 West Side Ave., Jersey City, N. J., $104,006; (A) $3,973; (B) $12,477; (C) $11,881; (D) $12,275; (E) $63,600. Novelty Steam Boiler Works, 917 South Howard St., Baltimore, (E) $69,990. Wheeler Condenser & Engineering Co., 146 Cedar St., New York, (B) $19,775; $11,200. Warren Steam Pump Co., 95 Liberty St. New York, (A) $4,500. Williamson Bros. Co., Aramingo and Cumberland Sts., Philadelphia, (B) $14,580. Buffalo Steam Pump Co., 490 Broadway, Buffalo, N. Y., (A) $2,725. Alfons Custodis Chimney Construction Co., 95 Nassau St., New York, (E) $60,430; $54,100; $82,530; $75,775. Morgan Engineering Co., Alliance, Ohio, (D) $11,670. Cleveland Crane & Car Co., Wickliffe, Ohio, (D) $11,500. Whiting Foundry & Equipment Co., Harvey, Ill., (D) $14,200. Pauling & Harnischfeger, Milwaukee, Wis., (D) $13,800. William Baragwanath & Son, 48 West Division St., Chicago, (B) $22,500. Case Mfg. Co., Curtis and St. Clair Sts., Columbus, Ohio, (D) $14,275. Alberger Condensing Co., 95 Liberty St., New York, (B) $20,815. H. R. Heineke, 147 Fourth Ave., New York, (E) $45,980. Westinghouse Electric & Mfg. Co., 11 Pine St., New York, (C) 11,027; $10,124. General Electric Co., Schenectady, N. Y., (C) $10,595. Alfred Box & Co., Front and Poplar Sts., Philadelphia, (D) $12,500. Modern Steel Structural Co., Waukesha, Wis., (D) $10,160. Niles-Bement-Pond Co., 111 Broadway, New York, (D) $13,645. Canton Boiler & Engine Co., Canton, Ohio, (E) $47,175. Henry M. Bulkley, 141 Broadway, New York, (B) $10,950. Fred. M. Prescott Steam Pump Co., Milwaukee, Wis., (A) $6,530, $3,761; (B) $14,938. Weber Steel Concrete Chimney Co., Marquette Bldg., Chicago, (E) $9,950. Henry R. Worthington, 114 Liberty St., New York, (A) $4,812; (B) $24,396. Northern Engineering Works, Detroit, Mich., (D) $13,720. Rust Boiler Co., 313 Sixth Ave., Pittsburg, (E) $44,000. Manning, Maxwell & Moore, 85 Liberty St., New York, (D) $11,795. Heine Chimney Co., Unity Bldg., Chicago, (E) $54,333. Epping-Carpenter Co., 41st St., Pittsburg, (A) $3,850.

WASHINGTON, D. C.—Bids were received Jan. 21 as follows at the office of Bernard R. Green, Supt. of Construction, new Museum Building, Washington, D. C., for electric wiring in the Museum building: Arthur Frantzen Co., Law Bldg., Baltimore, Md., (a) $88,984; (b) $86,500, paper covered cables. Cortlandt Engineering Co., New York, (a) $87,410; (b) $86,500. Kellar-Pike Co., Philadelphia, (a) $89,900; (b) $86,500. L. H. Nielson Co., Pittsburg, (a) $102,500; (b) $99,950. Watson-Flagg Engineering Co., Thames St., New York, (a) $99,700; (b) $94,700. Lord Electric Co. 213 West 40th St., New York, (a) $74,777; (b) $72,491. W. Drummond Marrow, Greensboro, N. C., (a) $93,513; (b) $91,350. Charles L. Eidlitz Co., 1168 Broadway, New York, (a) $101,613; (b) $97,343. National Electrical Supply Co., 1330 New York Ave., Washington, (a) $84,393; (b) $80,998. Western Electric Co. 57 Bethune St., New York, (a) $88,975; (b) $87,288. D'Olier Engineering Co. 121 South Eleventh St., Philadelphia, (a) $94,870; (b) $90,400.

MACON, GA.—The Macon Railway & Light Co. is contemplating extensive improvements at its power house, including the installation of a 1,000-KW. generator to furnish electricity for lamps. J. M. McFarland is Supt., Macon.

CHATTANOOGA, TENN.—See Buildings.

MOREHEAD, KY.—Bids are asked until Jan. 24, for installing a municipal electric light plant in this town, to cost $5,000. The plant will be operated by steam and will furnish energy for twelve 2,000-c. p. arc lamps and 1,000 16-c. p. incandescent lamps. In the equipment is included a 480-HP. automatic engine, a 50-KW. single-phase generator and an 80-HP. boiler. The Reliance Engineering Co., Fourth National Bank Bldg., Cleveland, Ohio, is Engr.

NEW ALBANY, IND.—The City Council has ordered a franchise prepared to be sold to the highest bidder to light the streets of the city. L. T. Mann is City Engr.

MURPHYSBORO, ILL.—The Murphysboro Water-Works, Electric & Gas Light Co. is contemplating installing a 500-KW., alternating-current, 2,200-volt, 2-phase direct-conected unit. W. O. Settle is Mgr.

MILWAUKEE, WIS.—Plans are being prepared for a power house which will be erected by the Continental Realty Co., near the Commerce St. station of the Milwaukee Electric Railway & Light Co. The cost of the plant is estimated at $50,000. Kirchhoff & Rose are Archs., 201 Grand Ave.

The Board of Public Works has sent notices to the various public service corporations requiring them to place their wires in underground conduits to get ready for the elevation of the railroad tracks on the south side. Charles J. Poetsch is City Engr.

MILLER, S. DAK.—The Miller Electric Co. is contemplating making additions and improvements to its plant, which include the installation of a new engine and dynamos. Ira C. Robinson is Mgr.

NEVADA, MO.—The Missouri Water, Light & Traction Co. will let contracts within a few weeks for installing the following equipment: Two 225-HP. water tube boilers; 600-HP. exhaust steam heater; 600-HP. live steam water purifier and the necessary piping. Hiram Phillips is receiver for the company.

KANSAS CITY, MO.—The H. C. Keating Co., 1500 Grand Ave., will establish a steam-heating plant with 2,000-HP. capacity. A building 50 × 140 ft. will be erected, one story and basement, concrete and brick, to cost $30,000; cost of machinery, $20,000. R. E. Richardson is Mgr.; E. A. Barth is Engr. and Arch. The URBAN CONSTRUCTION CO., Dwight Bldg., has general masonry and carpenter contract.

EUREKA, CAL.—It is stated that the Humboldt Gas & Electric Co. intends to increase the capacity of its plant at the foot of Whipple St., Eureka, 150%. The plant in the East End, controlled by the North Mountain Power Co., will be increased threefold. H. L. Jackman is Mgr. of the N. M. P. Co. and is interested in the H. G. & E. Co.

ST. PAUL (BOULEVARD), QUE.—L. J Marchand, owner of the local electric light plant, contemplates adding a 150-KW. generator direct connected to a vertical condensing engine to his plant. F. Sevigny is Supt.

THREE RIVERS, QUE.—The North Shore Power Co. is contemplating extending its transmission lines to Ste. Anne de la Perade, Batiscan Champlain, Ste. Maurice and St. Malo. Ralph B. McDunnough is Mgr.

HAVELOCK, ONT.—The Northumberland-Durham Power Co. is about to make application to the Dominion Government for permission to develop power at the Upper Healey Falls. It is said 14,000 HP. can be developed here.

TORONTO, ONT.—We are informed by the Secretary of the Hydro-Electric Power Commission, of Ontario, Continental Life Bldg., Toronto, that the following is the result of the recent elections held in the different municipalities to decide whether they would avail themselves of power through the Commission. Each town and city voted a sum of money to construct distribution plants. The municipalities are as follows: Toronto, $2,500,000, C. H. Rust; Hamilton, $225,000, E. G. Barrow; London, $235,000, A. O. Graydon; Brantford, $55,000, T. H. Jones; Galt, $65,000, W. M. Davis; Stratford, $35,000; Woodstock, $27,500, F. J. Ure; Guelph, $50,000; St. Marys, $15,000; New Hamburg, $10,000. Besides those given above, the following towns are included: St. Thomas, Waterloo and Hespeler. Where possible, the sum voted and the names of the city or town engineers are given.

OGDEN, UTAH.—The Utah Light & Ry. Co. will begin work erecting a $300,000 power plant at Devil's Gate, 18 miles east of Ogden, early in the spring. The plant will have a capacity of 2,000 HP. Joseph S. Wells, Gen. Mgr. of the Utah Light & Ry. Co., states that some work has been done on the site, but that active work will not begin until spring, when it will be completed. It is estimated that the work will take about a year. Construction material for the Weber Canyon plant is now being purchased and taken to the site as rapidly as possible. It is reported that the company intends to erect a steam plant in Salt Lake City, Utah, to cost about $250,000.

COEUR D'ALENE, IDAHO.—It is stated that the Consumers' Co., Ltd., will install in its plant an electrically driven pump of about 150 or 200 HP. George Harding is Mgr.

BRIDGEWATER, N. S.—We are officially advised that the Micmac Gold Mining Co., 2 Rector St., New York, intends to install a power plant to serve its mines located seven miles from this town. The plant will be built on a tributary of the La Have River, nine miles from the mines, where it is intended to build a dam 200 ft. long and 15 ft. high. The dam will be constructed of concrete, logs or timber. A 6 × 8-ft. flume, 1,000 ft. long, and 400 ft. of 8-ft. pipe will be placed. It is the intention of the management to develop 400 HP. from a 100-ft. head now, and provisions will be made for developing additional power as work at the mines progresses, when additional mining machinery will be installed. At the mills on the mining property there will be a transformer house. The company will need two water-wheels, two generators, motors, turbine pumps, electric hoists, drills, tools, mining machinery, nine miles of wire and about 500 cedar poles. It is estimated that the cost will be from $45,000 to $50,000. Work will be started on this project at once. Phil H. Moore, 2 Rector St., New York, is Consult. Engr.; W. B. Arnold, Boston, Mass., is Secy.

BRIDGES.

(denotes that this work is advertised in Engineering News.)*

FALL RIVER, MASS.—The extension of Warren St. from Jefferson St. easterly across the Quequechan River to meet East Warren St. has been proposed. This would necessitate the construction of a bridge about 1,000 ft. in length.

A bridge is also proposed across the line of location of the Old Colony R. R. (N. Y., N. H. & H.) by the Park Commission, to connect the two portions of South Park. P. D. Borden is City Engr.

ELMWOOD, MASS.—The Park Commissioners have had plans prepared for the construction of a bridge at Pine St. Estimated cost, about $12,000.

BUFFALO, N. Y.—Bids are asked until Jan. 30 by the Commissioners of Public Works for the construction of a foot-bridge over the Erie R. R. tracks at Alabama St.

NEW YORK, N. Y.—Bids are asked until 2 p. m., Feb. 6, by James W. Stevenson, Comr. Bridges, for the construction of additional girder supports for the main towers of the Williamsburg (new East River) Bridge over the East River, between the Boroughs of Manhattan and Brooklyn.

SOUTH BETHLEHEM, PA.—We are officially advised that the time for receiving bids for the construction of the Northampton Heights iron bridge, [illegible] ft. long, has been extended to Feb. 1. [illegible] E. Neumeyer is Engr., South Bethlehem, Pa.

KITTANNING, PA.—Bids are asked until noon, Jan. 29, by B. J. [illegible], County Clk., for bridge alterations.

BEAVER, PA.—The directors of the Pittsburg & Lake Erie R. R. Co. have authorized the construction of a 1,757-ft., two-track cantilever bridge. Estimated cost, about $2,000,000. G. H. Soles, Pittsburg, Pa., is Supt. B. & B.

CARTERTON, VA.—Bids and plans and specifications are asked until Feb. 8 by Silas B. F. Counts, Secy. Bd. Comrs., Carterton, for constructing an iron bridge across the Clinch River at Carterton.

WASHINGTON, N. C.—A. J. HOOD & CO. have been awarded the contract by the Board of County Commissioners for the construction of bridges over the Pamlico River at Washington and Aurora, at about $50,000.

ATLANTA, GA.—Bids are asked until Feb. 5 by the Board of Roads and Revenues, at Atlanta, for plans for a ferro-concrete bridge across Peachtree Creek on Peachtree Road in Fulton County, the bridge to be 80 ft. wide, 60 ft. in driveway and 10 ft. on either side in walkways. The bids must give estimates of cost of bridge and statement of commissions to be charged for plans and superintendence. Clifford L. Anderson is Chn. Bd.

SAVANNAH, GA.—Bids are asked until noon, Feb. 3, by the County Commissioners, S. Reuben Butler, Clk., for furnishing the material and erecting a steel highway drawbridge over the Great Ogeechee River at Kings Ferry. Noted Jan. 16.

GREENVILLE, MISS.—Bids are asked until noon, Feb. 3, by W. W. Miller, Clk. Bd. of Supervisors, Washington County, for the construction of a pile bride across Granicus Bayou at Granicus Gin in the second district.

NEW ORLEANS, LA.—The City Council on Jan. 6 opened bids as follows for constructing a bascule bridge over Bayou St. John at Esplande Ave.: The Penn Bridge Co., Beaver Falls, Pa., $45,400; Romeheld Construction Co., $48,430, and Ottumwa Bridge Co., $53,500.

NAPOLEON, OHIO.—We are officially advised that bids are asked until Jan. 30 by F. J. Beck, County Audr., for the construction of the superstructure of a bridge. M. A. Sharp, Bryan, Ohio, is Design. Engr.

CLEVELAND, OHIO.—Bids are asked until 11 a. m., Feb. 12, by Board of County Commissioners for the construction of three concrete steel bridges, one in Mayfield Township and two in Parma Township. Julius C. Dorn is Clk. Bd.

CLEVELAND, OHIO.—The County Comrs. are considering the construction of the Denison-Harvard viaduct at an estimated cost of $463,000, the structure to be of steel about 2,710 ft. long.

WALKERVILLE, MICH.—Plans for the construction of the steel bridge over the Grand Trunk Ry. tracks on Sandwich St. have been completed and approved by the Grand Trunk and the Detroit United Ry. companies and the engineer of the Dominion Railroad Board. T. T. Irving, Durand, Mich., is Resident Engr. B. & B. Grand Trunk Ry. System.

MINNEAPOLIS, MINN.—The Minneapolis, Rochester & Dubuque Traction Co., Minneapolis, has awarded the contract for the construction of a railroad and wagon bridge, 550 ft. long, with a swinging draw span of 250 ft. over the Minnesota River between Hennepin and Scott Counties, near Hamilton Ferry, to the MINNEAPOLIS STEEL & MACHINERY CO., Minneapolis, at about $49,800. W. Peyton Mason, Minneapolis, is Gen. Mgr.

OMAHA, NEB.—Bids are asked until noon, Jan. 28, by the County Commissioners for the complete construction of a pile bridge, about 1,050 ft. long, across a portion of the South Platte River, extending from the south end of the new State bridge at Julesburg to the south bank of the South Platte River. C. W. White is Chn. Comrs.

GRAND FORKS, N. DAK.—Bids are asked until 2 p. m., Feb. 11, by Hans Anderson, County Audr., for the construction of any or all steel bridges to be erected during 1908.

CHILLICOTHE, MO.—The contract for the construction of 19 iron bridges with spans ranging from 16 to 30 ft. was awarded on Jan. 2 by the County Court to W. O. GRAHAM, at $3,100.

HUNTSVILLE, MO.—We are officially advised that bids are asked until Feb. 14 by the County Commissioners for the construction of the substructure and superstructure of a low truss bridge, capacity of 1,200 lbs. per sq. ft. N. A. Matlock, Huntsville, is Design. Engr; Forrest Morgan is County Engr.

EL PASO, TEX.—A viaduct will be constructed at Austin St. by the Galveston, Harrisburg & San Antonio Ry. Co., C. R. Morrill, Resident Engr., El Paso, and the El Paso Southern Ry. Co., E. C. Millett, Resident Engr., El Paso, after approval of plans by City Council. Estimated cost, $100,000.

DOVER, OKLA.—The Chicago, Rock Island and Pacific Ry. Co. will have a new bridge constructed across the Cimarron River near Dover. W. H. Petersen, Chicago, Ill., is Bridge Engr.

SILT, COLO.—We are officially advised that the time for receiving bids has been extended until noon, Feb. 3, by T. W. Jaycox, State Engr., for the construction of a 252-ft. span steel bridge with concrete abutments across the Grand River near Silt. G. N. Houston, Deputy State Engr.

JULESBURG, COLO.—Bids are asked until noon, Jan. 27, by the County Commissioners, C. W. White, Chn., for the complete construction of a pile bridge about 1,050 ft. long, across a portion of the South Platte River, extending from the south end of the new state South Platte River. Bids are also asked for material alone, or labor alone.

ABERDEEN, WASH.—The Street Commissioner has been directed to have two bridges constructed on Market St., west of Division St.

COLFAX, WASH.—Bids are asked until 2 p. m., Feb. 5, by the County Commissioners for the construction of nine bridges, mostly of steel construction.

PASADENA, CAL.—A new Linda Vista bridge may be constructed across the Arroyo Seco, between Los Angeles and Pasadena. Estimated cost, between $5,000 and $10,000. A. Noble, County Surv., has been instructed to prepare plans and specifications.

LOS ANGELES, CAL.—Preliminary plans and specifications for the improvement of Alessandro St. by constructing a retaining wall along the sides of the Baxter St. cut of the Los Angeles Interurban Ry., and a bridge over the tracks at Baxter St., have been submitted to the Board of Public Works by Homer Hamlin, City Engr.

NEW WESTMINSTER, B. C.—E. P. Moss, Consulting Engr., has been authorized by the City Council to make the borings necessary for foundations for the Lulu Island steel bridge.

VANCOUVER, B. C.—The by-law to provide $1,120,000 for bridges in this city has been voted on favorably by the ratepayers.

BUILDINGS.

(denotes that this work is advertised in Engineering News.)*

BOSTON, MASS.—The following are the bids opened on Jan. 10 by the Board of Trustees of the Consumptives' Hospital, 1151 Tremont Bldg., Edward F. McSweeney, Chn., for erecting a ward building, corridor, powerhouse and tunnel, on the hospital grounds, River St., Mattapan, Boston: Benjamin Fox, 71 Devonshire St., $118,339; McGahey & O'Connor, 95 Milk St., $111,529; J. W. Duff, Auburndale, Mass., $107,143; Dillon Bros., 84 High St., Milford, Mass., $105,900; C. H. Belledeu, 5 Province Court, $103,782; McNeil Bros., 196 Freeport St., Dorchester, $99,000; Whiton & Haynes Co., 35 Federal St., $97,375; Horton & Hemenway, 683 Atlantic Ave., $97,101; George A. Fuller Co., 131 State St., $96,985; George W. Harvey Co., 24 Milk St., $96,471; C. A. Dodge & Co., 8 Beacon St., $89,997; Anthony Varnerin, 15 School St., Boston, $88,235, and B. F. Carroll, 217 Walnut St., Brookline, $81,235.

NEW YORK, N. Y.—Rouse & Sloan, Archs., 11 East 43d St., advise us that the work of improving the block bounded by 129th and 130th Sts., Convent Ave. and St. Nicholas Terrace, a plot measuring 216 ft. on the avenue and 585 ft. on the streets, will be begun in the spring. The project calls for the erection of eight elevator apartments, each 100 × 139 ft., with 25-foot gardens between each house. There will be about 420 apartments in the houses. A central power station is to supply light, power and heat. The facades will be Colonial and the materials of the building will be limestone, Harvard brick and terra-cotta. The structures will be built for the Central Building Improvement & Investing Co., 149 Church St., at a cost of about $1,500,000.

Plans have been filed for a 6-story brick and stone apartment house, 124.10 × 147.10 ft., to be built at the corner of Jumel Pl. and 167th St. for Harry Lehr, 720 Tinton Ave. Also for a 6-story brick and stone apartment house, 113.10 × 138.2 and 76.1 ft., for the same owner. Each building will cost $185,000 and is being designed by Sommerfeld & Steckler, 19 Union Sq.

NEW YORK, N. Y.—The Senate has passed the bill appropriating $3,500,000 for the erection of a post-office building in New York on the Pennsylvania R. R. terminal site. The building will stand on the east side of Eighth Ave., between 31st and 33d Sts. The lot is 415 ft. deep. It was bought by the Government for $1,660,000.

We are officially informed that Charles E. Birge, 29 West 34th St., is preparing plans for a 12-story brick, stone and terra-cotta apartment building, 100 × 100 ft., to be erected at 86th St. and Riverside Drive, for R. H. Macdonald & Co., 29 West 34th St. Contracts probably will be let in February. Cost, $350,000.

NEW YORK, N. Y.—Bids are asked until 2.30, Feb. 4, by Robert W. Hebberd, Comr. Public Charities, for the completion of the abandoned contract of the Church Construction Co., dated Dec. 12, 1905, for the erection and entire completion of the new municipal lodging house in the Borough of Manhattan, situated approximately 400 ft. east of First Ave., and on the southerly side of 25th St., the city of New York, together with the abandoned supplemental contract, dated June 7, 1907, for the completion of a boiler pit, caisson work, new foundation work, etc.

We are officially advised that six apartment houses will be built on Washington Heights at a cost of $500,000. G. F. Pelham, Arch., 500 Fifth Ave., is preparing the plans. The structures will be six stories high. They will stand on the north side of 143d St., between Broadway and Hamilton Pl. Each will be 70.10 × 86 ft. The three houses on the Broadway side will be built for Joseph H. Davies. Those on the Hamilton Pl. side, 454.2 ft. east of Broadway, will be built by Jacob Axelrod's West Side Construction Co., Jacob Axelrod, Pres., Morningside Ave. and 118th St. The steel contract has been let to SIMONS & MAYER, 143 Ave. D, and the stone contract has been let to BELLEWS & CO. The carpenter and electrical contracts have not been let as yet.

EASTON, PA.—A. A. Richter, Arch., Lebanon, Pa., is about to let contracts for a 7-story bank and office building, to be built at Easton for the Northampton National Bank. Granite, brick and reinforced concrete, architectural and structural iron and steel are to be used for construction. Cost, $200,000.

WASHINGTON, D. C.—The Carnegie Institution, Robert S. Woodward, Pres., Bond Bldg., has awarded contract to J. E. & A. L. PENNOCK, Land Title Bldg., Philadelphia, Pa., for construction of Administration building at corner 16th and P Sts., N. W. It will have one story and basement, will be 100 × 100 ft., with limestone exterior; fireproof construction throughout. Cost, about $200,000. Carrere & Hastings are Archs., 225 Fifth Ave., New York.

ELKINS, W. VA.—Bids are asked until noon, Feb. 7, by John A. Bock, Chn. Com., Farmington, W. Va., for erecting a 3-story building, 150 × 130 ft., for the Odd Fellows' State Home, at Elkins. It will be built of press brick, with stone trimmings. Alexander & Chaplin, New Martinsville, W. Va., are Archs. Cost, $150,000.

NEW ORLEANS, LA.—The Tulane University has let contract to GEORGE J. GLOVER, Hibernia Bank Bldg., for the 3-story brick and stone Richardson Memorial medical building, 241 × 65 ft., to be erected at a cost of $150,000. Andry & Bendernagel are Archs., 211 Camp St. Edwin B. Craighead is Pres.

CHATTANOOGA, TENN.—We are officially advised that the Chattanooga Station Co., Fairfax Harrison, Washington, D. C., Pres., has awarded contract to GEORGE BECKING, of Chattanooga, for erection of umbrella sheds in connection with proposed passenger station. Contract for the main building has been awarded to the WELLS BROS. CO., 160 Fifth Ave., New York. Donn Barber, 24 East 23d St., New York, is Arch., and William D. Jenkins, News Bldg., Chattanooga, is company's Engr.-in-Charge. Other contracts, including construction of powerhouse, boiler-house, platform, etc., are to be awarded.

CINCINNATI, OHIO.—Bids are asked until noon, Feb. 17, by William Grautman, Chn. Bd. of Education, City Hall, for erecting the proposed 3-story Hughes High School building, 272 × 192 ft., on McMillan St., from plans by J. Walter Stevens, New York Life Bldg., St. Paul, Minn. Cost, $750,000. Edward Hannaford, Pickering Bldg., Cincinnati, is Heating and Ventilating Engr.

FORT WAYNE, IND.—The contract for erecting the Anthony Hotel, for the Fort Wayne Hotel Co., Charles McCulloch, Pres., has been awarded to HENRY HILGEMAN, of Fort Wayne, for $225,377 for general construction, not including plumbing and heating. Masonry has been let to IMSHER & POTTHOFF. Weatherhogg & Crocker, National Bank Bldg., are Archs.

DETROIT, MICH.—James Knox Taylor, Snperv. Arch., Treasury Dept., Washington, D. C., has decided to reject all bids recently received for the construction of an extension to the Detroit post-office, and will prepare new plans providing for an additional story.

DETROIT, MICH.—Cram, Goodhue & Ferguson, 15 Beacon St., Boston, Mass., are preparing plans for a cathedral for the St. Paul's Protestant Episcopal congregation, Detroit. Estimated cost, from $250,000 to $300,000. The Rev. Charles David Williams is Bishop of Detroit.

CHICAGO, ILL.—Plans for a new cell-house to be erected in connection with the House of Correction at California Ave. and 26th St., are being prepared by Charles F. Herman, City Arch. It will be four stories high, 50 × 265 ft., and will be constructed of brick and stone with slate roof. The interior construction will be fireproof and will be heated with steam from a central plant. The building will contain 320 cells and will cost $175,000.

C. A. Eckstorm, Arch., 131 La Salle St., has awarded carpenter contract to A. J. C. LEDGERWOOD, 184 La Salle St., for a mercantile building, at the corner of Madison and Market Sts., for Edwin S. Hunter, 169 East Jackson Boulevard. It will be twelve stories high, 62 × 100 ft., of brick, stone and steel construction, and will cost $300,000.

MADISON, WIS.—Bids are asked by M. E. McCaffrey, Secy. University of Wisconsin, until March 2, for the erection of a women's gymnasium at the University. Bids will be received on the entire construction; also separate bids on finishing hardware and for the following materials: 3,200 bbls. Portland cement, 1,000 cu. yds. torpedo sand, 1,800 cu. yds. crushed limestone or gravel, 75 cu. yds. crushed granite for finishing. Probable cost, $150,000. Arthur Peabody, Law Building of the University, is Arch.

DES MOINES, IOWA.—Bids will be received about March 15 by the Board of Public Works for the erection of the proposed City Hall, to cost about $250,000. Proudfoot & Bird, Crocker Bldg., are Archs.; W. W. Wise is Chn.

ST. LOUIS, MO.—A building permit has been issued to the Aberden Investment Co., W. A. Gill, Pres., to wreck the old buildings at the corner of Broadway and St. Charles St. The cost is estimated at $2,000. The lot is to be improved with a commercial building, to cost about $125,000. Work will begin as soon as the lot has been cleared.

William B. Ittner, Arch., Bd. of Education, is preparing plans for a 3-story, 22-room school building, to cost $160,000; and for a 3-story school building for colored children, to cost $150,000.

Contract has been let by William B. Ittner to the HIRAM LLOYD BUILDING & CONSTRUCTION CO., Odd Fellows' Bldg., for a 3-story brick and stone high school building, 289 × 250 ft., to be erected at Union and Kensington Aves. for the Board of Education. Cost, $625,000.

KANSAS CITY, MO.—Jarvis Hunt, 100 Jackson Boulevard, Chicago, Ill., is revising plans and specifications for the Union terminal station, at 22d St. and Grand Ave., Kansas City, Mo., for the Kansas City Terminal Co., H. L. Harmon, Pres. Station is to be three stories high, 515 × 167 ft., and train shed, 166 × 335 ft., of brick, stone and fireproof construction, with iron skylights, ornamental iron work, tile, marble and mosaic, plate glass, oak and mahogany trimming, hardwood floors. Cost, $2,500,000.

HOUSTON, TEX.—Bids were received as follows, Jan. 15, at the office of James Knox Taylor, Superv. Arch., Treasury Dept., for Washington, D. C., for construction of a post-office building at Houston, Tex.: Ambrose B. Stannard, St. James Bldg., New York, $295,642; H. A. Bishop, 218 La Salle St., Chicago, $291,000; William H. Maxwell, Spokane, Wash., $317,840; Buchanan & Gilder, Fort Worth, Tex., $348,822; Tom. Lovell & Sons, Denton, Tex., $328,392; James A. McGonigle, Leavenworth, Kan., $277,870; John Bardon, Fort Worth, Tex., $295,100; C. C. Wenzel, Houston, Tex., $303,000.

COLORADO SPRINGS, COLO.—Bids are asked until 3 p. m., March 2, by James Knox Taylor, Superv. Arch., Treasury Dept., for the construction, including plumbing, gas piping, heating apparatus, electric conduits and wiring, of the U. S. post-office and court-house at Colorado Springs.

SPOKANE, WASH.—Cutter & Malmgren, Archs., Exchange Bank Bldg., have prepared plans for a 6-story hotel and store building, 73 × 120 ft., to be erected at Fifth Ave. and Union St., for C. J. Smith, and to cost $110,000.

WATER SUPPLY—IRRIGATION.

(denotes that this work is advertised in Engineering News.)*

WORCESTER, MASS.—The CENTRAL SUPPLY CO., 35 Waldo St., Worcester, was awarded the contract on Jan. 14 by the Water Department for 10,000 ft. of 1¼-in. and 20,000 ft. of 1-in. wrought steel pipe, at $5.95 per 100 ft. for 1¼-in. pipe, and $4.25 on 1-in. pipe.

FALL RIVER, MASS.—We are officially advised that the Water Board may have a reinforced-concrete reservoir constructed, in order to increase the storage capacity for use in case of emergency. Philip D. Borden is City Engr.

*MARION, MASS.—Bids are asked by the town until 7 p. m., Feb. 3, for furnishing materials and erecting a stand-pipe, 20 ft. in diameter, and 100 ft. high. Louis E. Hawes, 101 Tremont St., Boston, Mass., is Engr.

YONKERS, N. Y.—Bids are asked until 9 a. m., Feb. 3, by the Board of Contract and Supply for 200 ⅝-in. water-meters, six ¾-in. water meters and six 1-in. water meters. James D. McIntyre is Secy. Bd.

CANANDAIGUA, N. Y.—This city contemplates having installed two 2,500,000-gallon gear power pumps, connected to a tandem compound Corliss engine. G. R. Ellis is Supt. W.-Wks.

PENNINGTON, N. J.—The State Water Supply Commission, Trenton, N. J., contemplates having a reservoir constructed at Stony Brook, between Pennington and Rosedale, for the purpose of furnishing Trenton with pure water. The reservoir as planned would have a water surface of 4 1-3 miles and a drainage of 34 square miles. It would be 170 ft. above sea level, and water would be brought through a tunnel 9,000 ft. in length and a 4-ft. pipe 37,000 ft. long. Capacity, 24,000,000 gallons per day. Estimated cost, $2,000,000. Morris R. Sherrerd is Consulting Engr. State Water Supply Comn.

ORANGE, N. J.—The Council, on Jan. 6, passed an ordinance providing for the issuance of $200,000 water improvement bonds. Willet B. Gano is City Clk.

WASHINGTON, D. C.—The Secretary of the Interior has awarded the contract to the FEATHERSTONE FOUNDRY & MACHINE CO., 348 North Halsted St., Chicago, Ill., for furnishing a wheel pump for use in connection with the Yuma irrigation project, Arizona-California, at $2,643. This wheel will be used pending the completion of the project to raise water to the Farmers' Gravity Canal.

RICHMOND, VA.—The Common Council on Jan. 9 passed a resolution appropriating $18,000 to repair the feeder wall at the settling basin. C. E. Bolling is Supt. W.-Wks.

CHARLESTON, S. C.—The sub-committee of the Committee on Water Supply may recommend to the City Council that water mains in the northwestern section of the city be extended, and that a number of hydrants be placed along the new lines.

NEW ORLEANS, LA.—The contract for the 4,000,000-gallon pump for the Algiers water system was awarded on Jan. 9 by the Sewerage and Water Board to the EPPING-CARPENTER CO., at $5,950. Noted Jan. 16.

SOUTH BEND, IND.—Bids are asked until Feb. 12 by the Water Department for not less than 250 tons, nor more than 750 tons of water pipe.

FARGO, IND.—JAMES KENNEDY was awarded the contract on Jan. 6 by the City Council for the construction of a 6-in. water main and fire hydrant connections in Tenth Ave., south from Sixth St., to 150 ft. east of Sixth St. at $1.34 per lin. ft. for the water main and $59.50 for hydrants.

ANDERSON, IND.—The following bids were opened on Jan. 9 by the Board of Public Works for installing a 5,000,000-gallon reservoir at the water-works plant: Canton-Hughes Pump Co., Canton, Ohio, (four bids) $18,990, $16,990, $15,490, $12,990; William Todd, Youngstown, Ohio, (four bids) $17,650, $17,150, $14,625, $13,825; Nordberg Mfg. Co., Milwaukee, Wis. (four bids) $17,700, $16,900, $14,625, $13,825; Allis-Chalmers Co., Milwaukee, Wis., $16,570; Bethlehem Steel Co., Bethlehem, Pa. (two bids) $12,650, $12,100; Snow Steam Pump Co., 114 Liberty St., New York City (three bids) $18,785, $18,230, $18,450; Henry R. Worthington, 114 Liberty St., New York City, $11,240; Laidlaw-Dunn-Gordon Co., 114 Liberty St., New York City (four bids) $11,735, $13,630, $14,015, $11,385; Epping-Carpenter Co., Pittsburg, Pa., (four bids) $12,000, $16,490, $11,200, $16,365; Fairbanks-Morse Co., Indianapolis, Ind., (two bids) $13,258, $11,931.

GRAND RAPIDS, MICH.—Plans and specifications for the new 12,000,000-gallon vertical triple-expansion pumping engine to be installed at the pumping stations, have been completed by A. Freshney, Gen. Mgr., Bd. Pub. Wks. Noted Jan. 16.

ROCK ISLAND, ILL.—The Davenport Water Co. awarded the contract on Jan. 13 for remodeling and enlarging its filter plant by constructing two new filters and reconstructing the present equipment, to the NEW YORK CONTINENTAL JEWELL FILTRATION CO., 15 Broad St., New York City, at about $30,000.

BLOOMINGTON, ILL.—C. F. Fauntz, City Engr., has estimated the cost of laying the 20-in. water main from the pumping station to the vicinity of the Cleveland, Cincinnati, Chicago & St. Louis Ry., at $63,400 total cost, and $54,451 actual cost.

ST. PAUL, MINN.—Bids are asked until Jan. 27 by the Board of Water Commissioners, John Caulfield, Secy., for furnishing and delivering f. o. b. cars St. Paul, the following: 61,000 ft. 4, 6, 8, 12 and 16-in. pipe, with the privilege of 15,000 ft. additional; water gates from 4 to 24 in. in diameter; hydrants, size No. 1 and No. 2; valve and service stop boxes, required during the year 1908; c. i. special castings during the year 1908. L. E. Rundlett is City Engr.

LAWTON, OKLA.—Bids will soon be asked by the City Council for the construction of a water system for the Fifth Ward. Estimated cost, $25,000.

CLAREMORE, OKLA.—Contracts have been awarded by the city as follows: To DIMNICK PIPE CO., Birmingham, Ala., for c. i. pipe, $30.15 per ton; to WESCO SUPPLY CO., of St. Louis, Mo., for 60-HP. 3-phase, 2,300-volt motor; to DEANE STEAM PUMP CO., Indianapolis, Ind., for 500 G. P. M. triplex pump. Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., are the Engrs. in-Charge.

SEATTLE, WASH.—The City Council has passed ordinances providing for the laying of water mains on Olive St. Estimated cost, $19,700.

SEATTLE, WASH.—The following ordinances have been passed ordering street improvements: East 65th St. and other streets, water mains, $6,300; 24th Ave. North and other streets, water mains $2,335; 15th Ave., N. W., water mains, $3,500.

TACOMA, WASH.—Ordinances have been passed by the City Council for the following street improvements: Laying a 12-in. cast-iron water main, together with the necessary hydrants, gates, tees, crosses and specials, and connection with the present mains in District No. 527, and a 6-in. wooden water main with same appurtenances in District No. 528. L. W. Roys is City Clk.

TACOMA, WASH.—Articles of incorporation of the White Bluffs Irrigation Co. have been filed in the County Auditor's office by F. R. Hill and J. C. Todd. The company is incorporated for $73,000. The trustees are F. R. Hill, R. J. Davis, J. C. Todd, C. A. Todd, J. W. Mowell, D. C. Jackson and F. A. Scott.

RAINIER, ORE.—The contract for the construction of the Rainier water system has been awarded to GIEBISH & JOPLIN at $20,336.

SAN FRANCISCO, CAL.—T. W. Ransome, Consulting Engr., has prepared plans and specifications for the proposed salt water supply. The plans provide for three reservoirs, two pumping stations, 90 miles of pipe, two fresh water stations, etc. Estimated cost, about $5,250,000.

OAKLAND, CAL.—The Peoples' Water Co. submitted plans to the Board of Public Works on Jan. 10, for the construction of a reserve pumping station with a capacity of 3,000,000 gallons a day, at the foot of 24th Ave., East Oakland. Estimated cost, $7,500.

TUCSON, ARIZ.—The City Council has awarded the contract for installing the new pipe line for the city water department to THE AMERICAN LIGHT & WATER CO., 103 New England Bldg., Kansas City, Mo., at $251,940. Frank S. Treat is City Clk.

PHOENIX, ARIZ.—W. A. REES & CO. were awarded the contract on Jan. 10, by the City Council for installing the city water distributing system, at $27,561. Robert A. Craig is Supt. W.-Wks.

JUNCTION, UTAH.—The State Board of Land Commissioners has under consideration the construction by the state of a reservoir in Piute County. Preliminary surveys have been completed for the work. The reservoir will have a capacity of 90,000-acre ft. of water, and will irrigate 20,000 or more acres of land not now under irrigation. The location of the reservoir will be at Junction, the county seat of Piute County, twelve miles south of Marysvale. The water will be taken from the Sevier River. In addition to the construction of the reservoir the plans of the Land Board involve the enlargement of the Sevier Canal and the building of a new canal to cover a large tract of the land proposed to be negotiated.

GUELPH, ONT.—The ratepayers have voted favorably on the by-law to provide $125,000 to remodel the water-works system and bring water from springs four miles from the town.

SEWERAGE.

(denotes that this work is advertised in Engineering News.)*

BROOKLYN, N. Y.—Bids are asked until 11 a. m., Jan. 29, by Bird S. Coler, Boro. Pres., for constructing sewers in various streets.

NEW YORK, N. Y.—Bids are asked until 2 p. m., Jan. 29, by Henry S. Thompson, Act. Boro. Pres., for the reconstruction and extension of sewers in various streets.

NEW YORK, N. Y.—Bids are asked until 11 a. m., Jan. 30, by Louis F. Haffen, Pres. Boro. of The Bronx, for constructing sewers in various streets.

BUFFALO, N. Y.—Bids are asked by the Commissioner of Public Works until Jan. 31 for the construction of sewers in the following streets: For 12-in. tile sewer in Fulton St., between Ohio Basin Slip and Chicago St.; for 42-in. brick sewer in Caroline St., between Erie Canal and Fourth St.; for 10-in. tile sewer in Scott St., between Clark & Skinner, Canal and Michigan Sts.; for 15 × 12-in. tile sewer in Sunny Side Pl., Hirtel Ave. to North End.

EAST RUTHERFORD, N. J.—The citizens on Jan. 14, voted in favor of the construction of a complete sewer system. Estimated cost, about $50,000.

WASHINGTON, D. C.—Bids were received as follows on Jan. 15, at the office of the Commissioners of the District of Columbia, for the construction of sewers in the District: (A) R. J. Beall Construction Co., Washington; (B) E. G. Gummel, 300 Rhode Island Ave., N. W., Washington; (C) Warren F. Brenizer Co., Second and O Sts., S. E., Washington. Ordinary excavation, (A) 83 cts. per cu. yd.; (B) 60 cts.; (C) 78 cts.; sewer brick masonry, (A) $16; (B) $14; (C) $15; 15-in diameter sewer pipe, (A) 97 cts.; (B) 69 cts.; (C) 92 cts.; 12-in. pipe, (A) 85 cts.; (B) 55 cts.; (C) 80 cts.; 10-in. pipe, (A) 80 cts.; (B) 48 cts.; (C) 65 cts.

TUSCALOOSA, ALA.—The contract for constructing a sewerage system for the University of Alabama consisting of approximately 4,900 ft. 8-in., 1,200 ft. 10-in., 1,110 ft. 12-in., and 2,160 ft. 15-in. sewer, and 25 manholes (bids opened Dec. 31) has been awarded to C. M. BURKHALTER, Birmingham.

VICKSBURG, MISS.—Preliminary surveys have been completed for the construction of a sewer system for this city, and $250,000 bonds have been voted for installing system. Henry Trowbridge is City Clk.; W. G. Kirkpatrick, Jackson, Miss., Consulting Engr.

*HATTIESBURG, MISS.—Bids are asked until 8 p. m., Feb. 10, by the City Clerk for the construction of sanitary sewers, according to the following statement of quantities of work: 2,000 lin. ft. 12-in. sewer, 15,150 lin. ft. 8-in. sewer, 7 flush tanks, 900 cu. yds. excavation, 45,000 ft. B. M. foundation lumber, 2,640 lin. ft. 15-in. sewer, 8,550 lin. ft. 10-in. sewer, 90 manholes, 20 cu. yds. concrete masonry, 140,000 ft. B. M. sheeting left in trench. J. H. Putnam is City Engr.

HAMILTON, OHIO.—Bids are asked until Feb. 18 by the city for the construction of the big Crawford's Run sewer and ditch.

CANTON, OHIO.—Bids are asked until noon, Jan. 31, by Board of Public Service, B. F. Faust, Clk., for constructing two sewers, including 1,340 lin. ft. 8-in. vitrified pipe sewer and 980 lin. ft. 6-in. vitrified pipe sewer. W. E. Sarver is City Engr.

CARTHAGE, OHIO.—A. Cowen, Engr., has submitted a plan to the Village Council for the construction of a sewer system, estimated to cost about $100,000; it has not yet been decided whether the system will consist of a combined sanitary and storm sewer or simply a storm sewer.

YOUNGSTOWN, OHIO.—The contract for the construction of Section No. 2 of the Mahoning Ave. sewer was awarded on Jan. 11 by the Board of Public Service to JOHN GRADY at $13,102.

GARTLAND BROS. secured the contract for that section of the Mahoning Ave. sewer extending from the city limits to the bridge over Mill Creek, at $12,701.

FAIRVIEW (Detroit post-office), MICH.—A sewer system will be constructed in Fairview, the City Council having decided that the old system is inadequate. Estimated cost, $250,000.

JACKSON, MICH.—Bids are asked until 7.30 p. m., Jan. 31, by Board of Public Works for 20, 30, 36, 42 and 48-in. reinforced concrete sewer pipe. J. F. Harrison is Supt. Pub. Wks.

DOWNERS GROVE, ILL.—Bids are asked until Jan. 24 by the Board of Local Improvements for constructing storm and surface water drains, requiring about 1,220 lin. ft. 15-in., 1,615 lin. ft. 12-in., 9,070 lin. ft. 10-in. vitrified tile storm and surface water drains; 98 c. i. storm and surface water inlets of the adjustable curb and gutter pattern; 24 brick manholes, 3 ft. internal diameter. J. S. Lozier, Engr., Downers Grove.

WOODSTOCK, ILL.—Bids are asked until Jan. 24 by the Board of Local Improvements for the construction of a sewerage system. Estimated cost, about $80,000. W. S. Shields, Hartford Bldg., Chicago, Ill., is Engr.

QUINCY, ILL.—The Board of Local Improvements has ordered plans and specifications prepared for the extension of the north end sanitary sewer system about 16 blocks, 2 × 3 ft. egg-shaped brick sewer, and about 75 blocks of pipe from 24 to 8-in. Fred L. Hancock is City Engr.

ST. PAUL, MINN.—The contract for the construction of the Warrendale sewer system, including five miles of sewer near Lake Como, was awarded on Jan. 9 by the Board of Public Works to the GENERAL CONTRACTING CO. at $49,765. R. L. Gorman is Clk. Bd. L. W. Rundlett is City Engr.

FORT MORGAN, COLO.—The Town Council contemplates having a sewerage system constructed, estimated to cost about $70,000. C. H. Meeker, of McCook, Neb., is Engr. G. R. Rickel is Town Clk.

CLIFF, WASH.—A sewerage system may be constructed here, plans having been formulated for this improvement.

BAKERSFIELD, CAL.—We are officially advised that GLASS & FISHER, Bakersfield, were awarded the contract on Jan. 7 by the Board of Trustees for the construction of the main and outfall sewer system, at $53,780.

OAKLAND, CAL.—Contracts were awarded by the City Council on Jan. 4 as follows: To JOHN GEARY, sewer in East 16th St., from Sixth to Seventh Aves.; to MICHAEL MURPHY, sewers in Hillside Ave., south of Linda Ave., in College Ave., from 59th St. to Clifton St., in 56th St., from Vicento to Claremont Ave., in 41st St., east of Telegraph St.; to LOUIS LIMA, sewers in East 14th St., west of 15th Ave., and in Clinton St., from Spring St. to East Summit Ave.

MULLAN, IDAHO.—Plans and specifications have been completed for the proposed sewerage system. Estimated cost, about $12,000.

PRINCE ALBERT, SASK.—The ratepayers passed the by-law providing $50,000 for a sewerage system. F. A. Creighton is Town Engr.

GARBAGE DISPOSAL.

(denotes that this work is advertised in Engineering News.)*

NEW HAVEN, CONN.—The following bids were received on Jan. 14, by the Board of Health for the removal of garbage in (a) Western district, (b) Eastern district: (a) A. N. Farnham, $6,000; NATILE ACUNTO, $5,150 (awarded contract); (b) ROPERT D. DALY, $5,000 (awarded contract); John Nortell, $4,500; Irving Bigelow, $4,000.

PHILADELPHIA, PA.—H. A. CLEEMAN & BRO. were awarded the contract on Jan. 13 for the removal of snow for this year at the following prices: double loads to the dumps, $1.54 each; single loads, 86 cts. each; double loads to the manholes, 90 cts. each; single loads, 40 cts. each. George R. Stearns is Dir. Pub. Wks.

READING, PA.—Bids are asked until 7 p. m., Jan. 28, by the City Clerk for the collection, removal, and disposal of all garbage and offal for the period of one, two, three, four and five years. Elmer H. Beard is City Engr.

BALTIMORE, MD.—The contract for the disposal of the city's garbage from 1908 to 1918, previously reported as having been awarded to the Baltimore Products Co., has been awarded to the SOUTHERN PRODUCTS CO., Fidelity Bldg., Baltimore, at $587,500. The company also agrees to purchase the city disposal plant for $100,000 and remove it a greater distance from the city. B. T. Fendall is City Engr.

STREETS AND ROADS.

(denotes that this work is advertised in Engineering News.)*

RIDGEFIELD, CONN.—The contract for the construction of 9,750 lin. ft. of gravel road on the Salem Road has been awarded by James H. MacDonald, State Highway Comr., to BENNETT N. BEARD & CO., Shelton, Conn., at $1 per lin. ft.

NEW YORK, N. Y.—The following bids were received on Jan. 7 by Louis F. Haffen, Pres. Boro. Bronx, for paving with granite block pavement on a sand foundation the roadway of Burnside Ave., from Webster Ave. to Aqueduct Ave., and setting curb where necessary: Atlantic Construction Co., 62 William St., $49,154; D. W. MORAN, 562 Burnside Ave., $47,599 (awarded contract); Republic Construction Co., 18 Broadway, $49,340; W. W. Madill, $57,475; J. Farrell, $50,446; T. Crimmins Contracting Co., 444 East 69th St., $50,211; H. Gowdon, $57,490; M. Baird Construction Co., 433 East 92d St., $51,454; Hickey Contracting Co., 250 West 61st St., $55,056.

NEW YORK, N. Y.—Bids are asked until 11 a. m., Jan. 30, by Louis F. Haffen, Pres. Boro. Bronx, for regulating, grading, setting curbstones, flagging the sidewalks, laying crosswalks, building approaches, and placing fences, paving and repaving various streets.

*NORTH OLEAN (Olean post-office), N. Y.—Bids are asked until 7.30 p. m., Feb. 13, by the Board of Trustees, for paving Union St. with about 16,000 sq. yds. of brick on concrete base, with the necessary excavation, curbing, street inlets and other work and accessories. Cornelius Sullivan is Pres. Bd. Knight & Hopkins, Rome, N. Y., are the Engrs.-in-Charge.

FORT H. G. WRIGHT (New London, Conn., post-office), N. Y.—Awards have been made as follows for road work, etc., at Fort H. G. Wright, N. Y.: H. H. MORGAN, Westerly, R. I., for grading and retaining wall, etc., $6,705; roads, gutters, drains and catch-basins, $15,378; concrete walks, $3,323; F. A. ELDREDGE, Westerly, R. I., grading, $11,646.

PITTSBURG, PA.—Bids are asked until noon, Feb. 10, by F. P. Booth, County Controller, for 38,000 tons, more or less, of ballast and screenings for various improved roads.

HEMPFIELD (Rohrerstown post-office), PA.—Bids are asked until Feb. 3 by Joseph W. Hunter, State Highway Comr., Harrisburg, Pa., for constructing the West Newton Road in Hempfield Township, Westmoreland County.

HARRISBURG, PA.—Bids are asked until Feb. 3 by Joseph W. Hunter, State Highway Comr., Harrisburg, for following road work: Road in Union Township, Mifflin County, 4,488 ft. long; Butler Township, Adams County, 11,600 ft. long; Meimo Township, Mifflin County, 15,300 ft. long; Warrior's Mark Township, Huntington County, 5,280 ft. long; St. Petersburg Borough, Clarion County, 4,420 ft. long.

KENNETT SQUARE, PA.—Bids are asked until Feb. 1 by Edward Ladley, Chn., for stone street work.

WASHINGTON, PA.—Bids are asked until noon, Feb. 6, by the County Commissioners, H. R. Campbell, Clk., for repairing, restoning and resurfacing the roadway and cleaning and repairing the culverts and cleaning out the side ditches of the following sections of improved highways, as well as such other repairs as the County Engineer may order: The Zollarsville Road, length three miles; the Beallsville Road, length two miles; the Claysville Road, length three miles. William Wylie is County Road Engr.

WILMINGTON, DEL.—The Street and Water Board has recommended that new pavements be laid in various streets.

BALTIMORE, MD.—Bids are asked by the Board of Awards until 11 a. m., Jan. 29, for grading, curbing and paving Heath St., from the east side of Light St. to the east side of Johnson St., with bitulithic or Belgian blocks. B. T. Fendall is City Engr. J. Barry Mahool is Pres. Bd.

BALTIMORE, MD.—We are officially advised that the FILBERT PAVING & CONSTRUCTION CO., Pennsylvania Bldg., Philadelphia, Pa., was awarded the contract, on Dec. 27, by the Board of Awards, for paving Konig St. between Linden and Bolton Aves. with sheet asphalt, at about $3,000.

WASHINGTON, D. C.—The Commissioners of the District of Columbia have awarded to the WISE GRANITE CO., Wise, N. C., the contract for furnishing 12,000 ft. of straight granite curbing at 99 cts. per ft., and 1,500 ft. of curved curbing at $1.30.

FORT BARRANCAS, FLA.—Specifications are on file at the office of Engineering News, New York, for the construction of a 200,000-gallon reinforced concrete reservoir. Bids are asked until Jan. 24.

OPELOUSAS, LA.—Bids will soon be asked by the Board of Aldermen for the construction of sidewalks. Estimated cost, $10,000.

LOUISVILLE, KY.—Bids are asked until Jan. 29 by the Board of Public Works for the reconstruction of Bismarck Ave., from 26th St. to 28th St., and Bank St., from 33d St. to 37th St., with asphalt. Estimated cost, $33,000.

YOUNGSTOWN, OHIO.—Bids are asked until Jan. 27 by the Board of Trustees, Coitsville Township, at the office of S. D. L. Jackson, Youngstown, for grading and macadamizing the McCartney road, Coitsville Township.

Bids are asked by the Board of County Commissioners until 11 a. m., Feb. 3, for grading the McCartney hill, Coitsville Township. Will B. Jones is County Audr.

NEWARK, OHIO.—Bids are asked until Feb. 1 by the Board of Public Service for constructing about three miles of brick pavement, with sandstone curb and gutter.

DAYTON, OHIO.—Bids will soon be asked for the construction of the unfinished portion of curb and gutter on Keefer St.

An ordinance has been passed by the Council for improving Bacon St., from Clinton to Detroit Sts. with new curb, and paving the roadway with brick, bituminous macadam, sheet asphalt, creosoted wooden block, plain macadam or broken stone; also Jackson St., from Richard St. to Burns Ave.

An ordinance has been passed authorizing an issue of $18,500 street bonds. John N. Betscher is Pres. City Council.

TERRE HAUTE, IND.—Bids are asked by the Commissioners of Vigo County until 11 a. m., Feb. 22, for the construction of two miles and 415 ft. of gravel road in Honey Creek Township. Nathan G. Wallace is County Audr.

BRAZIL, IND.—Bids are asked by the Commissioners of Clay County until 11.30 a. m., Feb. 6, for the construction of the following stone roads: Road No. 1, 33,267 ft.; road No. 2, 10,675 ft.; road No. 3, 5,285 ft. Jas. L. Burns is County Audr.

BEDFORD, IND.—Bids are asked by the Commissioners of Lawrence County until 1 p. m., Feb. 10, for the construction of macadamized roads as follows: In Marion Township, five roads, 10,453, 11,650, 968, 2,000 and 1,745 ft. in length respectively, and one road in Spice Valley Township, 1,862 ft. in length. Walter G. Owens, County Audr.

ROCKVILLE, IND.—Bids are asked by the Commissioners of Park County until 1 p. m., Feb. 6, for the construction of seven gravel roads in Howard Township, namely: Hocker Road, Burns Road, Henry Road, Demaree Road, School Road, Sullivan Road, and the Rusk Road. H. A. Henderson is County Audr.

NEW ALBANY, IND.—Bids are asked by the Commissioners of Floyd County until 10 a. m., Feb. 6, for the construction of a gravel road in Georgetown Township. Julian I. Miller is County Audr.

SALEM, IND.—Bids are asked until 10 a. m., Feb. 3, by the Commissioners of Washington County for the construction of 8,456 ft. of macadamized road in Monroe Township.

WASHINGTON, IND.—Bids are asked until Feb. 4 by the Commissioners of Davies County for the following gravel roads: Road petitioned for by William Dayton and others; road petitioned for by Jerry Goodwin and others; the Charles A. Sims road; road petitioned for by George Little and others; and road petitioned for by Jacob Ressler and others. Thomas Nugent is County Audr.

MANISTEE, MICH.—Bids are asked until 2 p. m., Feb. 6, by C. A. Gnewuch, City Clk., for paving Maple, Mason and Jones Sts., approximately 6,500 sq. yds., with either brick, bituminous macadam or bitulithic wearing surface on a concrete foundation, and 3,800 lin. ft. combined curb and gutter.

GRAND RAPIDS, MICH.—Bids are asked until 8 p. m., Jan. 23, by Board of Public Works for grading and paving East Bridge St., from North Ottawa St. to Barclay St. Samuel A. Freshney is Gen. Mgr. Bd.

DOWNERS GROVE, ILL.—Bids are asked until Jan. 24 by the Board of Local Improvements for grading and macadamizing Lincott Ave. and East Parkway, and for constructing cement sidewalks. J. S. Lozier, Downers Grove, is Engr.

LEBANON, ILL.—Bids are asked by the Board of Local Improvements until Jan 28 for constructing 10,890 sq. yds. of brick paving and 3,395 lin. ft. sandstone curb.

ST. LOUIS, MO.—Bids are asked until noon, Feb. 11, by the Board of Public Improvements for improving and reconstructing various streets. W. B. Dr[illegible] is Secy. Bd.

SEATTLE, WASH.—We are officially advised that R. H. Thomas, City Engr., has reported upon the estimated cost of the following street improvements: Mayfair Ave. and others, concrete sidewalks, $14,000; West Stacy St., planking.

J. A. BAILEY, 1005 Fifth Ave., West, has been awarded the contract by the Board of Public Works for planking Hanford and other streets, at $3,855.

The City Council has passed an ordinance ordering the improvement of Virginia St., from West Lake Ave. to Ninth Ave., by planking. Estimated cost, $1,7[illegible]

SEATTLE, WASH.—We are officially advised that R. H. Thomas, City Engr., has reported upon the estimated cost of the following street improvements:

Mayfair Ave. and others, concrete sidewalks, $14,000; West Stacy St., planking.

J. A. BAILEY, 1005 Fifth Ave., West, has been awarded the contract by the Board of Public Works for planking Hanford and other streets, at $3,855.

The City Council has passed an ordinance ordering the improvement of Virginia St., from West Lake Ave. to Ninth Ave., by planking. Estimated cost, $4,700.

MACHIAS, WASH.—FRED GEMMER was awarded the contract on Jan. 8 by the County Commissioners for constructing the Happy Hollow Road, 4½ miles long, near here, at $6,635.

TACOMA, WASH.—WELLS WHEELER has been awarded the contract for constructing gutters and wooden sidewalks in the district between North 36th St. and North 49th St., and Verde and Baltimore Sts., at $18,343. Frank L. Davis is City Engr.

SEATTLE, WASH.—The RAINIER DEVELOPMENT CO. has been awarded the contract for regrading Denny Hill, at 27 cts. for excavation, and has sublet the work to S. J. Stillwell & Co., Portland, Ore., at 22 cts. per yd.

The following ordinances have been passed ordering street improvements: Utah St. and other streets, planking, $12,000; 20th Ave., N. E., and other streets, grading, $3,750; alley in Block 14, Borens addition, paving, $4,600; alley in Blocks 26 and 27, Denny's addition, sandstone paving, $4,400; alley in Block 20, Borens addition, vitrified brick, $3,000; Prospect St. and other streets, concrete walls, $14,900; Virginia St. and other streets, asphalt pavement, $16,200; Bagley Ave. and other streets, grading, $27,400.

SACRAMENTO, CAL.—Bids are asked until 8 p. m., Jan. 27, by M. J. Desmond, City Clk., for macadamizing Q St., from the easterly line of the alley between Front and Second Sts. to the westerly line of 22d St.

OAKLAND, CAL.—Contracts for street improvements have been awarded as follows by the City Council: To the HUTCHINSON CO. for improving East 21st St., from 14th to 17th Aves., and Frederick St., from Park to Kennedy St.; to BLAKE & BILGER, for improving Opal St., from 38th to 49th St., and 35th St., from San Pablo Ave. to western boundary of city; to BERKELEY ROCK CO., for improving Miranda St., from Claremont to Vincente St.

BISBEE, ARIZ.—J. O. CALLAHAN has been awarded the contract by the County Supervisors, Tombstone, Ariz., for the widening of Naco Road, between Bisbee and Lowell, at 15 cts. per cu. yd. for removing earth; 35 cts. for loose rock; $1.10 for solid rock, and 2 cts. a yd. for an overhaul of 200 ft.

MANUFACTURING PLANTS.

(denotes that this work is advertised in Engineering News.)*

CAMBRIDGE, MASS.—George H. Taylor, 689 Massachusetts Ave., has plans for an addition to the New England Syrup Co., Second and Monroe Sts.

BOSTON, MASS.—The Boston Cold Storage Co. has purchased wharfage property at 8 to 16 New St., East Boston. It is the intention of the company to improve the property and install freezing machinery for storing fish. John Burns, Jr., is Pres.; Louis B. Goodspeed, 16 T Wharf, Treas.; Frank Neal, Secy.

WATERVLIET, N. Y.—The Tiona Oil Co. has purchased land in the city of Watervliet and is about to commence the construction of a branch plant. The company deals in illuminating oil and has branches in Binghamton, Scranton and at other points. The land purchased by the company consists of 5½ acres near 25th St. Eventually the company will erect ten tanks, but its present plans call for the erection of but five. The total capacity of the ten tanks when erected will be 80,000 gallons. Each tank will weigh about ten tons and will be 25 ft. in diameter. The tanks will be erected in a row, about five feet apart.

PHILADELPHIA, PA.—The A. Schoenut Co., 2215 Adams St., are having plans prepared by Ballinger & Perrot, 1200 Chestnut St., for a 5-story addition to its factory building.

ZELIENOPLE, PA.—The Iron Sanitary Mfg. Co., Pittsburg, has had plans prepared for a new foundry building at Zelienople, 60 × 240 ft., to have a capacity for handling 2,000 castings per day.

BALTIMORE, MD.—The Merchants & Miners' Transportation Co., J. M. Blankenship, Gen. Supt., Light and German Sts., has awarded contract to EDWARD BRADY & SON, 1109 Cathedral St., for construction of building for shops and ships' stores; six stories high, 50 × 83 ft., of brick with stone and terra-cotta trimmings. Located in this building will be boiler and engine room, blacksmith shop, machine shop, steam laundry and other facilities for making minor

repairs and housing stores for the company's ships. Charles E. Cassell & Son, Law Bldg., 222 Courtland St., Baltimore, are Archs.

WELCH, W. VA.—J. B. Stewart, Arch., Huntington, has let general contract to TAYLOR & ROBINSON for constructing a 3-story cold storage building, at Welch, for the Welch Cold Storage Co. and J. M. McCoach Co.

DREXEL, N. C.—D. B. Mull, of Drexel, is preparing to establish a mill for knitting hosiery, it is stated.

ANDERSON, S. C.—John T. Burriss & Son, it is reported, will establish plant for the manufacture of patented, metallic shingle, will erect building and install machinery at cost of about $5,000. The building is to be 50 x 150 ft., wood, with gravel roof. The plant will manufacture tin shingles; capacity not yet estimated.

CHARLESTON, S. C.—It has been decided that the proposed waste mill to be built at Charleston will be known as the Charleston Waste Mills. The capital stock will be $200,000, and it is expected that organization will be effected soon. It is estimated that about 20,000,000 lbs. can be secured annually, to be manufactured into wadding, batting, blankets and rope. A. C. Tobias, Edison A. Smythe, John A. Law, James D. Hammett, R. G. Rhett, George A. Wagener and George Lunz are the promoters.

ST. STEPHENS, ALA.—The Mobile Portland Cement Co. has been incorporated with capital stock of $1,750,000 to build plant for manufacturing 2,500 bbls. of Portland cement daily. Plans will specify buildings of reinforced-concrete construction, to be equipped with various machines, including revolving kilns each each ft. in diameter by 125 ft. long, with daily capacity of 500 to 600 bbls. All machinery is to be driven by electricity and entire plant to be automatic. Probably natural gas or oil will be used for fuel and 1,000 acres of coal land may be developed for fuel. The company will build cooperage with daily capacity of 2,000 bbls., and timber on lands purchased will supply raw materials; will also build operatives' cottages, large machine shop for general repairs, chemical laboratory, etc., and provide docks, barges and other facilities, according to the "Manufacturers' Record." Col. Edward L. Russell is Chn. of Bd. Pat J. Lyons, Leopold Hammel, William Watson Thompson, Sidney Lowenstein and others, all of Mobile, Ala., are Dirs. The company's offices are at Mobile, Ala.

SHEFFIELD, ALA.—The King Stove & Range Co., Sheffield, Ala., is arranging to rebuild the portion of its plant recently destroyed by fire. A foundry room, 300 ft. long, with concrete walls, will be erected and equipped with complete overhead trolley

YOUNGSTOWN, OHIO.—The National Light & Thorium Co. will erect a plant to replace that recently destroyed by fire. The new plant will be larger than the former one.

The works of the Pennsylvania Stove Co., located at Ellwood City, Pa., will be moved to Youngstown, the plant now being the property of the Youngstown Furnace & Supply Co. The foundry will be located in the Crab Creek manufacturing district and will be near the old Sennett Building used by the Harris Safety Co. The work of dismantling the Ellwood City plant will be started about the middle of March. A new building to serve as a warehouse and mounting room will be erected shortly. The plans for this structure are being prepared under the supervision of Owsley & Boucherle. Bids for this work are being received. L. H. Young is Pres. and Myron A. Wick is Secy.-Treas. of the Youngstown Furnace & Supply Co.

HARBOR BEACH, MICH.—The Huron Milling Co., mentioned on Jan. 2, as having plans and specifications prepared for a proposed plant, has had the plant completed and is operating it.

HARVARD, ILL.—We are officially advised that the Harvard Packing Co. will receive bids in about two weeks for constructing a 2-story plant, 40 x 30 ft., to cost $4,000; also for alterations and additions to old buildings. Machinery costing $20,000 will be installed, including refrigerating machinery, hydraulic press, steam pumps, etc. Daniel Hereley is Pres.

OSKALOOSA, IOWA.—T. M. Allbrook, of Delphi, Iowa, is negotiating with the Oskaloosa Commercial Club to build a brick plant in this city at a cost of $200,000.

PERRY, IOWA.—The Schwene Mfg. Co., Ogden, Iowa, and the Perry Mfg. Co., Perry, have been consolidated under the latter name. The new company at Perry, Iowa, will manufacture a line of steel hardware and specialties, also dies and special machinery. Plans have been completed for the construction of a factory, 50 x 100 ft., two stories high, also drying sheds and storage warehouse for steel, the buildings to be erected as soon as the weather permits.

MINNEAPOLIS, MINN.—The Helix Cream Separator Co. has been incorporated to erect a manufacturing plant, 60 x 160 ft., in the Midway District, to cost $20,000. P. K. Nielson is the Pres.

ELK CITY KANS.—The Elk City Ice Cream Co., recently organized, will build an ice making plant, ice cream factory and cold storage rooms.

OKLAHOMA CITY, OKLA.—J. C. Fisher, Okeene, Okla., is reported to be contemplating establishment of cement plant to have daily capacity of 400 tons and cost about $200,000. It is understood that plant will be operated from the offices of the Leech Cement Co., Oklahoma City.

DENVER, COLO.—The American Packing & Provision Co., Denver, will build a packing house on a site recently purchased near the Denver Union Stockyards, it is stated. Estimated cost, $20,000. Harry C. Vail is Interested.

COLORADO SPRINGS, COLO.—We are officially advised that the Rocky Mountain Can Co., 17 East Pike's Peak Ave., Colorado Springs, is preparing to erect a main building for its factory 50 x 100 ft. and three stories in height in addition to a wing already built 40 x 100 ft. and two stories in height. J. M. Flagler is Supt. Stock and Supplies; O. LeRoy Burch is Mgr.

ALAMOGORDO, N. MEX.—M. H. FISHER has secured contract for erecting an ice plant for Levi Oren and associates.

SEATTLE, Wash.—J. W. Efaw has procured a permit to build a 2-story frame factory building, 56 x 106 1-3, at 1719 Sixth Ave. South, at a cost of $20,000. Schack & Huntington, Archs., Coleman Bldg., drew the plans. The building is to be used for a mattress manufacturing plant.

HILTS, CAL.—A box factory and about twelve cottages probably will be built here by the Northern California Lumber Co. A saw mill will be erected about four miles from here at the head of Cottonwood Creek. A railroad will connect the box factory with the saw mill. Cost, $100,000.

MISCELLANEOUS CONTRACTS.

(denotes that this work is advertised in Engineering News.)*

U. S. RECLAMATION SERVICE.—All news relative to canal projects, etc., will be found under Water Supply—Irrigation.

DITCH.—Breckenridge, Minn.—Bids are asked by R. P. Glover, County Audr., until Jan. 24 for constructing Ditch No. 8. Estimated cost, $12,700.

DITCH.—Kankakee, Ill.—Contract for constructing the Claussen drainage ditch has been awarded to A. BENNEMA, West Pullman, Chicago. Cost, about $20,000.

CORRAL FENCE.—Fort Riley, Kan.—Bids are asked until Jan. 28 by Capt. W. M. Whitman, Constr. Q. M., U. S. A., for constructing a corral fence for Artillery Stable No. 157.

CREOSOTE.—Victoria, B. C.—Bids are asked by W. A. Northcott, Pur. Agt., for supplying the city with creosote in drums or barrels not exceeding in quantity 750 drums of 90 gals. each.

DITCHES.—Forest City, Iowa.—Bids were received on Jan. 7 for constructing ditches 3 and 11. Contract was awarded to the INDIANA DRAINAGE CO., Thompson, Iowa. Estimated cost, $8,464.

WHARF REPAIRS.—Boston, Mass.—Bids are asked until 10 a. m., Feb. 10, by Capt. Ira L. Fredendall, Constr. Q. M., U. S. A., 263 Summer St., Boston, for making repairs to wharf at Fort Strong.

PAVING BRICK.—Detroit, Mich.—Bids were received on Jan. 17 by the Department of Public Works, J. J. Haarer, Comr., for furnishing and delivering 1,000,000 paving brick. List of bids will be given next week.

DITCH.—Geneseo, Ill.—Bids are asked until 1 p. m., Jan. 31, by the Commissioners of the Green River Special Drainage District for construction of the Gray Ditch and Conley Ditch, requiring the removal of about 128,260 cu. yds. of earth.

MOTOR TRUCK.—New York, N. Y.—Bids are asked until noon, Jan. 31, by Patrick Jones, Supt. of School Supplies, Dept. of Education, for furnishing and delivering gasoline motor truck to the Board of Education, the City of New York.

BOAT-HOUSE, ETC.—Biloxi, Miss.—Bids are asked by James Knox Taylor, Supervis. Arch., Treasury Dept., until 3 p. m., Feb. 15, for the construction of a boat-house and ways, and lagoon bridge, at Gulf Quarantine Station, Ship Island, Miss.

RAILWAY MATERIAL.—Fort Leavenworth, Kan.—Bids are asked by Capt. J. E. Normoyle, Q. M., until 11 a. m., Feb. 5, for furnishing and delivering f. o. b. cars at Fort Leavenworth, railway supplies, consisting of rails, switches and construction materials.

CEMENT.—Detroit, Mich.—W. W. Magee, Secy. Dept. Pub. Wks., states that all bids opened on Jan. 11 for furnishing and delivering in cloth or paper sacks, in car load lots, about 15,000 bbls. Portland cement have been rejected. New bids will be received. J. J. Haarer, Comr.

DITCHES.—Emmetsburg, Iowa.—Bids are asked until 1 p. m., Jan. 31, by the Board Supervisors, Palo Alto County, for constructing various ditches, etc. Sim R. Stedman, County Audr. Specifications are on file at office of Engineering News, New York. This will be a large contract. Noted on Dec. 19.

DITCH.—Albert Lea, Minn.—The County Auditor has let the contract for constructing Ditch No. 16, which is to drain land in Albert Lea, Freeman and Shell Rock Townships and empty into the Shell Rock River, to J. L. THOMAS, at 9 cts. a cu. yd. On the engineer's estimates, the total cost will be $11,376, exclusive of the miscellaneous expenses.

*DAMS AND SHORE PROTECTION.—Rock Island, Ill.—Bids are asked until 2 p. m., Feb. 17, by Maj. C. S. Riche, Corps Engrs., U. S. A., Rock Island, for construction and repair of dams and shore protections between Wisconsin River and Savanna, Ill.; between Rock Island, Ill., and Burlington, Iowa, and between Burlington, Iowa, and Hannibal, Mo.

DREDGING.—Brooklyn, N. Y.—Bids are asked until 11 a. m., Jan. 29, by Bird S. Coler, Boro. Pres., for furnishing all the labor and material required for dredging at and in the various basins of Gowanus Canal, namely: First St., Fifth St., Sixth St., Seventh St., and Eleventh St. basins. Estimated quantity, 33,600 cu. yds., scow measurement.

DUMP AND FILL.—New York, N. Y.—Bids were received on Jan. 13, by J. A. Bensel, Comr. of Docks, for the right to dump and fill in behind the bulkhead wall recently built or to be built on the northerly part of the new Bellevue section on the East River, Boro. of Manhattan. Contract was awarded to the T. A. S. SHERIDAN CO., 24 State St., City, at $11,232.

TUNNEL.—Buena Vista, Colo.—Bids are asked by the Princeton Mining Co. until noon, Feb. 1, for driving the Latchaw tunnel 1,000 ft. Property situated on Mt. Princeton, eight miles from Buena Vista. Tunnel now in 3,000 ft. All necessary machinery on property. The company reserves the right to hire its own engineers and to reject any or all bids. The property will be shown upon request. Chas. I. N. Sharpe, Supt., Buena Vista.

FREIGHT TRANSPORTATION.—Los Angeles, Cal.—One bid was received on Jan. 10 by the Board of Public Works, Horace B. Ferris, Secy., for transportation of freight for use in the construction of the Los Angeles Aqueduct. It was submitted by the Southern Pacific Ry., and classified according to various kinds of freight and the distance it is to be hauled. There are about 500 rates quoted, and the bid was referred to the aqueduct bureau.

TILE DRAINS.—Mason City, Iowa.—Bids are asked until Jan. 27 by A. S. Clark, County Audr., for constructing tile drains at Clear Lake for Drainage Dist. No. 3, Cerro Gordo County. There will be about four miles of 24", 14", 16" and 12" tile and two miles of 10", 8", 7" and 6" tile; average depth, about 4 ft. W. S. Colby is Engr., Clear Lake, Iowa. Estimated cost, $11,000. (Bids were asked until Sept. 11, 1907, for drains in Dist. No. 3, as noted on Sept. 5.)

MONUMENTS. — Vicksburg, Miss. — Bids were received by the Indiana-Vicksburg Military Park Commission, 25 State House, Indianapolis, Ind., on Jan. 8 for furnishing and erection of granite monuments and markers, in Vicksburg Military Park, at Vicksburg. Contract was awarded to the ANGOLA MONUMENT CO., Angola, Ind., at $32,585. Contract for bronze medallions and inscriptions to be placed on the monuments was awarded to the AMERICAN BRONZE FOUNDRY CO., Chicago, at $2,367.

*MARGINAL CONDUIT.—Boston, Mass.—Bids were received on Jan. 20, by the Charles River Basin Commission, for Contract No. 81, Boston Marginal Conduit, Section 6, Boston Embankment, Section 4, as follows: Jones & Meehan, 10 Tremont St., $69,054; W. H. Ellis, 17 Milk St., $74,700; Coleman Bros., 15 Court Sq., $84,592; William L. Miller, 19 Milk St., $87,054; Cavanagh Bros., 471 Dorchester Ave., $100,961; Charles R. Gow Co., 79 Milk St., $103,044. (Noted fully on Jan. 9.) The bids in detail will be given next week under Contract Prices.

CANAL.—Ottawa, Ont.—Bids are asked until 4 p. m., March 12, by the Department of Railways and Canals, L. K. Jones, Secy., Ottawa, for construction of Section No. 3, Ontario-Rice Lake Division, Trent Canal. J. B. Brophy, Div. Engr., Trenton, Ont.

As noted on Dec. 19, bids are asked until Feb. 1, for construction of Section 2, Ontario-Rice Lake Division of the Trent Canal. The Department of Railways and Canals has awarded contract for Sec. 1 of the Ontario-Rice Lake Division of the Trent Canal to LEWIS P. NOTT, of Montreal, Que.

TUNNELS.—Newark, N. J.—Bids were received on Jan. 7 by the Building Committee, Essex County Board of Chosen Freeholders, for construction of underground tunnels connecting the hospital buildings at Overbrook, N. J. E. C. Eaton, Chn. Contracts were awarded as follows: To the HARRISON CONSTRUCTION CO., 837 Broad St., Newark, for the actual work of building the various tunnels, for $51,750; to MILLER & SONS CO., 33 South 13th St., Newark, at $2,489, and to the MacHARG-BARTON CO., at $2,200, for smaller contracts.

CEMETERY.—Newark, N. J.—The Roman Catholic Cemetery Association of the Newark Diocese has closed negotiations for the purchase of 200 acres of land in Bergen County, near Kingsland, at a price of $200,000. The tract is to become one of the largest and handsomest cemeteries in New Jersey. The new cemetery will extend along the Arlington Ridge for a distance of one mile. Road making and other improvements will begin as soon as the weather permits. An appropriation of $100,000 has been made for improving the property. Rev. John J. O'Connor is Bishop of the Newark Diocese.

DRY DOCK.—New York, N. Y.—Bids were received as follows on Jan. 18 at the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for completing the granite and concrete dry dock at the New York Navy Yard. Prices are asked (a) on completing the work with new plant and (b) completing the same using machinery already on the ground and forfeited by the defaulting contractor: Williams Engineering & Contracting Co., 21 Park Row, New York, (a) $774,400, (b) $764,000; Phoenix Contracting Co., 41 Park Row, New York, (a) $798,700, (b) $777,777; Jas. Stewart & Co., 135 Broadway, New York, (a) $1,900,000, (b) $1,750,000; Gahagan & Hough, 32 East 33d St., New York, (a) $1,289,800, (b) $1,269,800.

DIRIGIBLE BALLOON.—Washington, D. C.—Bids were received as follows on Jan. 15 by Gen. James Allen, Ch. Signal Officer, U. S. A., for furnishing a dirigible balloon, the tests of which are to take place at Fort Myer, just across the Potomac River from Washington, when completed: Carl E. Meyers, Frankfort, N. Y., $9,996, 120 days for delivery; William Reiferscheid, Streator, Ill., $5,000, 150 days; Charles J. Strobel, Toledo, $8,000, 120 days; Harry B. Schiller, 514 Brown St., Philadelphia, $25,000, 120 days; John Kairles, 112 North River Ave., Mount Vernon, N. Y., no time specified. For a balloon making 20 miles an hour he submitted a bid of from $10,000 to $15,000; for a balloon capable of making 40 miles an hour he bid $25,000 to $30,000; A. W. Creecy, Washington, $12,500, in 90 days. Some concessions in the way of furnishing hydrogen and the silk to be used in construction were made by the government, thus giving an incentive to bidders of limited means to submit their propositions. The specifications required that the balloon shall carry two persons, weighing 350 pounds, with 100 pounds of ballast additional, and must be capable of making a speed of 20 miles an hour in still air. They also required that the balloon make an endurance flight of two hours at an average speed of 70% of the trial requirements, and maintain its equilibrium without changing position by the aeronaut. Only two of the bidders, Messrs. Meyers and Strobel, accompanied their proposals with a certified check to the amount of 15% of the price, as required by the specifications.

U. S. POSSESSIONS AND CUBA.

(denotes that this work is advertised in Engineering News.)*

*CABLE RAILWAYS, ETC.—Panama.—Bids are asked until 10.30 a. m., Feb. 3, by the General Purchasing Offices, Isthmian Canal Commission, Washington, D. C., for furnishing cable railways and duplex cableways.

STEEL DUMP BARGES.—Panama.—The Isthmian Canal Commission, Washington, D. C., upon recommendation from the Isthmus, has awarded to the NEWPORT NEWS SHIPBUILDING & DRY DOCK CO., 1 Broadway, New York, contract for the construction of four steel dump barges, at $80,000.

CEMENT.—Panama.—Bids were received as follows, Jan. 7, at the office of the Isthmian Canal Commission, Washington, D. C., for the furnishing of 35,000 bbls. Portland cement: Alpha Portland Cement Co., Easton, Pa., $54,600, 60 days; Alsen's American Portland Cement Co., 45 Broadway, New York, (a) $61,500, (b) $58,500; Atlas Portland Cement Co., 30 Broad St., New York, $55,500, 60 days; American Trading Co., 25 Broad St., New York, $54,370 at Colon, $71,770 at La Boca.

CONTRACT PRICES.

SEWERS.—New York, N. Y.—Bids were received on Jan. 7 by Louis F. Haffen, Pres. Boro. Bronx, for constructing various sewers in Boro. Bronx, as noted on Jan. 2. The bidders and bids in detail were as follows: (A) JAMES PILKINGTON, Ft. Washington Park (awarded contract); (B) McDonald & Barry, 183d St. and Tiebout Ave.; (C) Thos. E. Vermilege; (D) Thos. Crimmins Contracting Co., 444 East 69th St.; (E) M. Marrone, 414 East 116th St.; (F) Wm. F. Murray, 1155 Boston Road; (G) W. T. Brennan, 759 East 173d St.

	(A)	(B)	(C)	(D)	(E)	(F)	(G)
Concrete Sewers—							
1,025 lin ft., 11 ft. 6 in. x 7 ft. 3 in.	$43.14	$47.20	$50.00	$65.00	$43.00	$59.00	$45.00
1,678 lin. ft., 11 ft. x 7 ft. 2 in.	36.50	47.20	46.00	47.03	43.00	59.00	65.00
10 lin. ft., 11 ft., x 5 ft. 10 in.	43.80	89.13	40.00	80.95	43.00	69.00	65.00
1,584 lin. ft., 6 ft. 3 in. x 6 ft. 1½ in.	23.70	30.52	25.00	35.04	43.00	29.50	30.00
*10 lin. ft., 6 ft. 3 in. x 5 ft. 10 in.	31.20	68.87	25.00	54.40	43.00	59.00	30.00
2,874 lin. ft., 6 ft. x 5 ft. 11 in.	25.19	29.48	25.00	30.14	43.00	29.50	30.00
Pipe Sewers—							
34 lin. ft. 30-in.	8.00	20.00	6.00	21.50	6.00	6.90	6.00
15 lin. ft. 24-in.	7.00	4.00	6.00	5.32	6.00	5.00	5.00
18 lin. ft. 18-in.	6.00	3.50	6.00	2.14	5.00	4.00	4.00
9 lin. ft. 15-in.	5.00	3.50	6.00	1.84	4.00	3.00	3.00
550 lin. ft 12-in.	2.00	3.00	4.00	1.57	3.00	3.00	2.00
952 spurs for house connections, over cost per lin. ft. of sewer	1.00	.50	2.00	.40	1.00	1.00	....
38 hanholes, complete	50.00	210.00	100.00	49.60	67.00	89.00	100.00
8 receiving basins, complete	200.00	200.00	200.00	160.00	175.00	185.00	150.00
15,300 cu. yds. rock excav. and removed	3.00	2.50	4.00	3.00	.01	2.50	3.00
150 cu. yds. Class "A" concrete	10.00	12.50	60.00	12.00	6.00	12.90	10.00
1,800 cu. yds. Class "B" concrete	6.00	11.00	12.00	7.00	6.00	7.50	8.00
5,900 cu. yds. broken stone for foundation	1.00	4.00	2.50	2.25	2.00	2.50	3.00
100,000 lbs. steel bars, ⅝-in. and ¾-in. and ½-in. to 1¼-in.	.04	.05	.06	.03½	.04	.05½	.05
1,265 M ft. timber	30.00	30.00	15.00	30.00	.01	43.00	45.00
85,000 lin. ft. piles	.30	.30	.45	.30	.29	.35	.30
2,150 lin. ft. 6-in. pipe	1.00	.50	1.00	.72	1.00	1.00	1.00
100 lin. ft. 12 to 24-in. drain pipe	3.00	3.00	3.00	1.00	2.00	2.99	2.00
Totals	$356,234	$428,111	$416,723	$436,468	$370,417	$460,670	$465,638

TRADE PUBLICATIONS.

WATER DISTILLING APPARATUS.—Wagner Water Still Co., 87 Washington St., Chicago, Ill. Two folders, 3¼ × 6¼ ins.; pp. 4 and 6, respectively; illustrated.

Small gas-heated water stills, of capacities of 3, 5, 8 and 15 gals. per hour, are here described. Larger capacities can be secured by battery arrangements.

SUCTION GAS PLANTS.—R. D. Wood & Co., Philadelphia, Pa. Paper; 8½ × 11 ins.; pp. 12; illustrated.

In this pamphlet are shown some results of tests on suction gas power-plants and a few comparisons of installation and operation costs of such plants with steam-driven plants.

REINFORCED CONCRETE.—Turner Construction Co., New York. Bulletin No. 1, Nov., 1907; 8½ × 11 ins.; pp. 8; illustrated.

This is the first of a series of bulletins to be issued by this company upon reinforced concrete factories and warehouses. This first one describes quite thoroughly the large Robert Gair Building at Brooklyn, N. Y.

VERTICAL KILNS FOR CEMENT.—T. M. Morgan, care of C. W. Taylor, Canada Life Building, Montreal, Canada. Paper; 4 × 8½; pp. 12; illustrated.

The pamphlet briefly describes a vertical kiln for continuous cement burning, but it has apparently never been put into practical use. Four pages each are devoted to the same description in English, French and German.

GAS, GASOLENE AND ALCOHOL ENGINES.—The Dean Gas Engine and Foundry Co., Newport, Kentucky. Catalog 7. Paper; 9 × 6 ins.; pp. 40; illustrated.

Specifications are given for a line of internal combustion engines from 5 to 35 HP. A considerable part of the catalog is devoted to testimonials and explanations of the concern's methods of selling by mail.

REINFORCED CONCRETE PIPE.—The Reinforced Concrete Pipe Co., Jackson, Mich. 9½ × 12¼ ins.; pp. 35; illustrated.

The preface says: "This booklet is made up of pictorial exhibits illustrating the manufacture of our reinforced concrete pipe in various cities throughout the United States." The typographical work is remarkably good for this class of trade literature.

WEED-BURNER.—Commonwealth Steel Co., St. Louis, Mo. Paper; 9 × 6 ins.; pp. 6; illustrated.

This is a self-propelling machine, fitted with a gasoline engine and transmission gear, and using gasoline in connection with air jets to form a hot flame beneath an apron in front of the machine. Colored halftone engravings show the track before and after treatment.

PIPE COVERINGS AND HEAT INSULATING MATERIALS.—The Philip Carey Co., Cincinnati, O. Paper; 6 × 9 ins.; pp. 70; illustrated.

This is a descriptive catalog and price list of magnesia and asbestos pipe coverings, and a variety of insulating fabrics, paints, roofing materials, cement, etc. Illustrations are given of a number of plants in which the various materials are used.

SPECIFICATIONS OF STEEL BUILDINGS AND STEEL HIGHWAY BRIDGES.—Minneapolis Steel & Machinery Co., Minneapolis, Minn. Paper; two pamphlets; 8½ × 11 ins.; pp. 16 (each).

These specifications represent the company's practice as to design, material and workmanship, and are followed, unless others are required by purchaser. One class of the bridge specifications provides for heavy floor systems capable of carrying traction engines.

MACHINE TOOLS.—Newton Machine Tool Works, Philadelphia, Pa. Catalog 45. Cloth; 6½ × 9¼ ins.; pp. 304; illustrated.

This concern has brought into a substantial volume a vast amount of description of their general line of machine tools such as milling machines, planers, cold-saw cutting off machines, shapers, slotters, drills, boring mills, milling machines, etc. Each type of machine tool is illustrated in its several forms.

BOLTS—EXPANSION, TOGGLE AND OTHER SPECIALS.—Philadelphia Expansion Bolt Works and Steward & Romaine Mfg. Co., 124 N. Sixth St., Philadelphia, Pa. 6 × 9 ins.; pp. 43; illustrated.

To one not particularly acquainted with the variety and multiplicity in the design of expansion, toggle and other special bolts this catalog is a revelation. It should be well worth the while of any constructing engineer.

WOOD PIPE.—Wyckoff Supply Co., Elmira, N. Y. Paper; 6 × 9 ins.; pp. 79; illustrated.

This is really a small treatise on wood pipe of the kind made by this company. As is generally known, the pipe in question is made of wood staves tightly wound with steel bands and given a protective coating. Wire-wound pipe can be supplied. Steam-pipe covering is also furnished. The catalog gives tables and other useful information.

DRAINAGE DITCHING MACHINE.—Glencoe Foundry & Machine Co., Glencoe, Minn. Paper; 5¼ × 7 ins.; pp. 16; illustrated.

The McAllister ditching machine is a plow operated by a cable led to two capstans anchored 1,000 ft. to 3,000 ft. ahead, and placed on opposite sides of the line of the ditch. The capstans are driven by horses attached to long sweeps. Floating dredges for large ditches are also mentioned, and there is a list of purchasers of the company's machinery.

BRIDGE SIGNAL.—The Railroad Supply Co., Bedford Building, Chicago, Ill. Paper; 6 × 9 ins.; pp. 8; illustrated.

The Garret signal is designed to prevent accidents from the burning or washing out of bridges and trestles. A rope laid along the structure is connected to a controlling device, and its breakage will set the semaphore signal at the "stop" position. A suspended float connected to the controlling device will also operate the signal when the water rises above the danger line.

STRUCTURAL ENGINEERING.—Condron & Sinks Co., Civil Engineers, 1414 Monadnock Block, Chicago. Paper; 9 × 6 ins.; pp. —; illustrated.

This handsome pamphlet consists mainly of halftone and line engravings of steel and concrete structures designed by this firm. They include truss, girder and arch bridges; retaining walls, warehouses, car sheds, locomotive shops, grain elevators and the roofs and wall of the Indianapolis filter beds. A four-page circular shows forms of floor construction and the results of tests.

STEAM PUMPS.—A. S. Cameron Steam Pump Works, East 23d St., New York City. Catalog 35. Paper; 6 × 9 ins.; pp. 158; illustrated.

Illustration and description of the features of construction and design, worked out by this concern is herein presented with tabulated data on each type and size of pump manufactured. Among the pumps, for special purposes shown, may be noted boiler-feed, light service, fire, oil-line, water-works, condenser, sinking, mine, artesian well, wet and dry vacuum, air, circulating, marine types, etc. Among the special features of construction and operation may be noted short and long stroke, compound, outside packed, horizontal and vertical pistons, flywheel, etc.

SLIME FILTER PRESSES.—The Kelley Filter Press Co., 149 Pierpont St., Salt Lake City, Utah. Two 6 × 8-in. sheets; illustrated.

The Kelley pressure filter presses have been specially designed for the recovery of gold from slime by the cyanide process. The filter press is operated within a pressure tank, mounted on an inclined framework. An extension of the latter serves as a track for running out the press for removing the pressed slime. Counterbalances draw the empty press back. The advertising sheets do not explain the design and operation of the press, but this is set forth in detail in a pamphlet reprint of a paper by Mr. D. J. Kelley, inventor of the press, read before the Utah Section of the Association of Technical Chemists and Metallurgists, June 14, 1907. From the paper it appears that in place of metal filter plates and the usual cloths Mr. Kelley uses "double crimped wire cloth enveloped with a filter bag of cotton duck." These diaphragms are connected by piping with the head of the press and the piping serves to remove the filtrate. Compressed air is used in the filtering process.

MINING APPLIANCES AND MACHINERY.—The American Concentrator Co., Joplin, Mo. Bulletins 10, 11, 13 and 15, and a special pamphlet; paper; 6¾ × 10 ins.; illustrated.

Bulletin 10 covers "New Century" crushing and screening machinery, ore feeders, grizzlies, etc. The machinery is all belt driven.

Bulletin 11 covers "N. C." differential motion jigs for metalliferous ores, and contains a short dissertation on "The Art of Jigging." The defects of the ordinary eccentric-motion jig are contrasted with the differential-motion jig, with diagrams bringing out the advantages of the latter.

Bulletin 13 covers "N. C." coal-washing machinery by the jigging process, for both anthracite and bituminous coal.

Bulletin 15 is devoted to "N. C." tram conveyors for use both with cables and with rigid rails.

The special pamphlet covers the Knowles New Century Magnetic Separator for all magnetic ores. It contains reprints of articles on the subject of magnetic separation, in mining periodicals, by Guy H. Elmore and Prof. W. R. Crane.

For other Proposal Advertisements see pages 47, 48, of Advertisements and Construction News page 28.

STAND PIPE.

Marion, Mass.

The Town of Marion, Mass., will receive proposals for furnishing materials and erecting a Stand-Pipe 20 feet in diameter by 100 feet high, until 7 P. M., Monday, February 3, 1908. Specifications and blank forms for proposals can be obtained by intending bidders upon application to the Engineer at 101 Tremont St., Boston, Mass.

HARRY E. CONVERSE,
FRANK M. PATTEN,
GEO. M. DELANO,
Water Commissioners.

LOUIS E. HAWES,
Engineer.

Marion, Mass., January 16, 1908.

NOTICE TO CONTRACTORS.

A high grade superintendent or manager for construction work. Eighteen years' experience on concrete, masonry, dams, waterworks, conduits, State road work, etc. Can go anywhere immediately. Address "P. 4," Engineering News, New York.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., January 20, 1908.—Sealed proposals will be received at this office until 3 o'clock P. M. on the 28th day of February, 1908, and then opened, for the construction (except elevators) of the U. S. Post Office and Court House at Tuscaloosa, Alabama, in accordance with the drawings and specification, copies of which may be had at the office of the Custodian of site at Tuscaloosa, Ala., or at this office at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

SEALED PROPOSALS will be received at the office of the Light-House Engineer, Baltimore, Md., until 12 o'clock M., February 15, 1908, and then opened, for furnishing materials and labor of all kinds necessary for the completion and delivery of the Metal Work for LaTrappe River beacon lights, Md., in accordance with specifications, copies of which, with blank proposals and other information, may be had upon application to the Light-House Engineer, Baltimore, Md.

Situations Wanted

Civil Engineers.

YOUNG ENGINEER (28), 4½ years' experienve on railroad construction, location, trestle work, pile driving, also good draftsman, desires position in U. S. or Cuba. Address "L. A. 4," Engineering News, New York. 4-4t

CIVIL ENGINEER or Draftsman (27), six years experience railroad construction and maintenance; one year with contracting firm as superintendent; at present employed. Address "Z. B. 4," Engineering News, New York. 4-2t

CIVIL ENGINEER and Draftsman; 5 years' experience, surveys, municipal work, railroad surveys and construction. Address "P. A. 4," Engineering News, New York. 4-2t

CIVIL ENGINEER of wide experience in location, maintenance and operation of steam and electric railroads, now open for similar engagement. Good reference, if required. Address "A. B. 4," Engineering News, New York. 4-4t

CIVIL ENGINEER, instrumentman, computer, draftsman, vicinity of New York City. Address "B. B. 4," Engineering News, New York. 4-2t

Bridge and Structural Engineers.

BRIDGE AND STRUCTURAL ENGINEER, good designer, estimator and superintendent would accept position as bridge engineer for railroad or in charge of office or work for bridge company. References. Member American Society of Civil Engineers. Address "S. A. 4," Engineering News, New York. 4-2t

Surveyors.

WANTED—Position as levelman; four years' experience on municipal and railroad engineering; can furnish references; age 25; west or southwest preferred. Address "X. B. 4," Engineering News, New York. 4-3t

RODMAN (23) desires position; one year experience railway location and construction. I. C. S. student. References. Address "M. A. 4," Engineering News, New York. 4-3t

YOUNG COLLEGE STUDENT (23) desires position with a surveying corps; has had full course in railroad, mining, topographical and city surveying. Address "K. A. 4," Engineering News, New York. 4-1t

Draftsmen.

STRUCTURAL DRAFTSMAN, graduate civil Engineer, experienced in details of riveted and pin-connected highway bridges, railway plate girders, elevated railways, mill buildings, power-houses, office buildings, stand-pipes and steel-riveted pipes. Have done shop and field inspection. Open to engagement. Address "R. A. 4," Engineering News, New York. 4-3t

STRUCTURAL DRAFTSMAN (23) desires position; 4 years' experience on general building construction. Address "I. A. 4," Engineering News, New York. 4-1t

Superintendents, Misc., etc.

DESIGNER—Complicated special machinery or machine tools. Young engineer, broad experience. "H. T. B.," Union League, New Haven, Conn. 4-2t

ENGINEER, experienced in charge of designing and executing important undertakings in steel and concrete, is open for engagement in charge of new undertaking. Have recently designed important railroad structures and have just completed engagement building large manufacturing plant. Good references. Member American Society Civil Engineers. Address "W. A. 4," Engineering News, New York. 4-2t

SUPERINTENDENT for large and difficult contracts. Experienced on dry docks, power-houses, locks and dams, heavy masonry, difficult foundations, quicksand work, concrete piles, quay walls, etc. Technical graduate. Address "O. A. 4," Engineering News, New York. 4-3t

SUPERINTENDENCY of steam turbine plant desired by erecting engineer with several years' experience in power-house construction and operation of turbo-units of all sizes. Satisfactory references. Address "H. 2," Engineering News, New York. 4-2t

Situations Open

WANTED—Resident Engineer to take charge of the installation of sewerage system in small town. Write stating experience. SHAND ENGINEERING CO., Columbia, S. C. 4-1t

Miscellaneous Wants

WANTED—Information and literature on the subject of smoke-preventing devices, with the idea of burning soft coal in New York City without trouble with the Dept. of Health. Address "C. B. 4," Engineering News, New York. 4-1t

Team Work Wanted

for early spring work; 20 good teams and bottom dumpers.

WM. BAKER, Contractor,
4-tf 137 South St., Jersey City.

FOR SALE

FOR SALE.

PATENT

for reinforced concrete building column. Excellent business opportunity. Address "H. A. 4," Engineering News, New York. 4-2t

FOR SALE

1—LITTLE GIANT STEAM SHOVEL, 1 year old, 1¼ yd. dipper, 3 sets engines.
1—6 × 10 PORTER LOCO., S. T., 36" gage.
35 TON 30 LB. RELAYERS (some new).
1—BUFFALO PITTS ROAD ROLLER.
1—NO. 5 CHAMPION CRUSHING PLANT.
6—MUNDY HOISTING ENGINES, D.D-D.C., with boilers.

DYAR SUPPLY CO.,
7 Sudbury Street, Boston, Mass. 4-1t

Peat Machine

Mounted on portable platform, producing four tons peat fuel per hour. Latest German design. Strong and durable. Simple operation; 33 feet chain elevator. For sale $900—complete.

JULIUS BORDOLLO, Briquette Machinery, Kingsbridge, New York City. 4-2t

"WANT"

Advertisements in ENGINEERING NEWS cost 1½ cents a word an insertion for "Situations Wanted" and 3 cents a word for "Situations Open" and "Miscellaneous Wants." Read them weekly—they will help you.

CO

CONSTRUCTION
Plans and Spe
List of Contra
Railways .....
Electric Railw
Light and Pow
Bridges .....
Buildings ....
Water Supply
Sewerage ....
Garbage Disp
Streets and
Manufacturing
Miscellaneous
U. S. Posses
Foreign Contr
Contract Pri
CIVIL SERVICE
INDUSTRIAL N
TRADE PUBLI
PROPOSALS ..

CONSTR

PLANS AND S

(* *denotes that*
Eng

The following
(S.) are on file a
of The Enginee
220 Broadway, N

1-31 Ditches,
2- 1 Bridge, Ok
2- 1 Chimney,
2- 1 Highway,
.....
3- 1 Water-wor
couver,

LIST OF

LIGHT, HEAT

2- 1 Chimney,
2- 4 Light sys
2- 4 Dynamo,
2-13 Gas prod
2-15*Conduit,
2-20*Light fixt
2-25 Equipmen

1-31 Bridge,
1-31 Bridge, V
2- 1 Bridge,
2- 3*Steel bri
2- 3 Steel bri
2- 3 Steel dra
2- 3 Pile bri
2- 5 Bridges,
2- 5 Steel br
2- 5 Bridge
2- 6 Girder
2- 8 Iron br
2-10 Bridge,
2-10 Bridge,
2-11 Bridge,
2-11 Iron br
2-11 Wooden
2-11 Steel b
Dak.
2-12 Bridges
2-14 Bridge,
2-17 Steel br
2-17*Steel b
2-20 Steel s
3- 2 Drawbr

2- 1 School,
2- 4 Lodging
2- 6 Buildin
2- 7 Officers
2- 7 Home,
2- 7 School,
2-10 Repair
2-11*Post-of
Tenn.
2-11 Buildin
Mich.
2-12 Buildin
2-12*Boat-h
2-14 Post-o
2-17*Post-o
2-17 School
2-17 School
2-18 Post-o
2-18 School
2-20*Interio
2-21 Post-o
2-25*Post-o
2-28*Post-o
3- 2 Gymn
3- 2 Post-o
3- 4 Post-
3- 5*Post-
3- 8*Post-
3-16*Cathe

1-31 Wate
2- 3*Pipes
N.
2- 3*Stand
2- 3 Wate
2- 3 Wate
2- 8*Purm
2-11 Wate
2-11 Pres
2-12 Wate
2-15*Stee

2-15*Hyd
3- 3*Pum

1-31 Sew
1-31 Sew